

19980311.qrp v01\_n026.qrs.980311

Date: Wed, 11 Mar 1998 19:03:14 EST  
From: qrp-l@Lehigh.EDU  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: QRP-L digest 1026

QRP-L Digest 1026

Topics covered in this issue include:

- 1) [5728] Re: Current,+ to - ???  
by Monte Stark <ku7y@dri.edu>
- 2) [5729] Re: Current + to - ??  
by Larry East <w1hue@amsat.org>
- 3) [5730] GEOMAGNETIC STORM 3-11  
by Paul Harden <pharden@aoc.nrao.edu>
- 4) [5731] MFJ pacesetter ext power.  
by kd4zkw <kd4zkw@amsat.org>
- 5) [5732] Re: copper foil  
by W7LS <w7ls@blarg.net>
- 6) [5733] Elmer 101: RF probes  
by joel malman <malman@world.std.com>
- 7) [5734] RE: copper foil  
by "Adam B. Kanis" <adam-kanis@uiowa.edu>
- 8) [5735] Re: copper foil  
by mwattcpa@earthlink.net (Marty Watt)
- 9) [5736] Astron Volt Setting HELP  
by Mark S Adams <msadams@acsu.buffalo.edu>
- 10) [5737] Vertical Antenna Question  
by chunt@macromedia.com (Christian Hunt)
- 11) [5738] Re: Elmer 101: RF probes  
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 12) [5739] yaesu reflector?  
by wj5o@juno.com (William H. Hays)
- 13) [5740] modeling note  
by "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
- 14) [5741] Fw: Current,+ to - ???  
by "Roy Lincoln" <cc1595@cocentral.com>
- 15) [5742] O'scope help, pse!  
by AA3BP <AA3BP@aol.com>
- 16) [5743] Plus to Minus, Minus to Plus  
by "Rich Dailey, KA8OKH" <ka8okh@som-uky.campus.mci.net>
- 17) [5744] Re: Current,+ to - ???  
by Chuck Carpenter <w5usj@webwide.net>
- 18) [5745] Plusses and Minuses  
by Dale LeDoux <dledoux@laci.net>
- 19) [5746] Re: Plusses and Minuses

- by adams@chuck.dallas.sgi.com (Chuck Adams)
- 20) [5747] Trivial Pursuit for Dweebs (tm)  
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 21) [5748] Re: Plusses and Minuses  
by Bruce Hopkins - KL7JAF <kl7jaf@polarnet.com>
- 22) [5749] Nova-42  
by dave\_epps@juno.com
- 23) [5750] Help with laptop  
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 24) [5751] Dayton Rooms.....  
by Hank Kohl K8DD <k8dd@contesting.com>
- 25) [5752] Unbuilt kits for trade (complete station!)  
by mwattcpa@earthlink.net (Marty Watt)
- 26) [5753] Solder fume fix es other things  
by Roger Hightower <n7kt@earthlink.net>
- 27) [5754] MARS PATHFINDER (qrp but not amateur radio)  
by "ALAN KAUL" <alan.kaul@worldnet.att.net>
- 28) [5755] Re: Elmer 101: RF probes  
by "Wayne Barnhart" <wb7whi@triax.com>
- 29) [5756] Re: MARS PATHFINDER (qrp but not amateur radio)  
by Paul Harden <pharden@aoc.nrao.edu>
- 30) [5757] Topo Maps on CDRom  
by Peter\_Simpson@ne.3com.com
- 31) [5758] FT-101  
by "Peter Orban" <peter@peter237.imti.nrc.ca>
- 32) [5759] re: current flow + to - ??  
by k5zty@juno.com (Bill Stietenroth)
- 33) [5760] Re: O'scope help, pse!  
by k5zty@juno.com (Bill Stietenroth)
- 34) [5761] Re: Vertical Antenna Question  
by k5zty@juno.com (Bill Stietenroth)
- 35) [5762] Re: Vertical Antenna Question  
by Jess Gypin <jessqrp@concentric.net>
- 36) [5763] Argo 509 RF gain  
by cooper@gmpvt.com (Tom Cooper)
- 37) [5764] Converting Lat/Long?  
by "ukii" <ukii@megsinet.net>
- 38) [5765] Help  
by Brad Mugleston <bmug@gwl.com>
- 39) [5766] Elmer101  
by Brad Mugleston <bmug@gwl.com>
- 40) [5767] Re: Current,+ to - ???  
by "Buck, Preston D" <BuckPD@corning.com>
- 41) [5768] Re: Converting Lat/Long?  
by kd4zkw <kd4zkw@amsat.org>
- 42) [5769] Re: Elmer 101: RF probes  
by Arjen Raateland <Arjen.Raateland@vyh.fi>
- 43) [5770] Re: Converting Lat/Long?

by mwattcpa@earthlink.net (Marty Watt)

44) [5771] Re: O'scope help, pse!  
by Ed Loranger <we6w@qsl.net>

45) [5772] Chassis Dry Transfer Labels/stencils  
by Mike - W0TMW <crucis@sky.net>

46) [5773] Re: Trivial Pursuit for Dweebs (tm)  
by Mike - W0TMW <crucis@sky.net>

47) [5774] Re: Chassis Dry Transfer Labels/stencils  
by PDouglas12 <PDouglas12@aol.com>

48) [5775] Re: Converting Lat/Long?  
by LYN WILLIAMS <designserv@ipass.net>

49) [5776] Re: Chassis Dry Transfer Labels/stencils  
by "Frank A. West" <ke6vbm@earthlink.net>

50) [5777] Lat/Long source  
by Steve Pitts <stv@cnw.com>

51) [5778] Re: Chassis Dry Transfer Labels/stencils  
by Dale Scott <dcscott@us.ibm.com>

52) [5779] Re:Chassis Labels etc.  
by "Steve Galchutt" <n0tu@webaccess.net>

53) [5780] Re: Elmer101  
by Michael Maiorana <mikemo@ibm.net>

54) [5781] Copper foil  
by sarraf@thermacore.com

55) [5782] Re: Chassis Dry Transfer Labels/stencils  
by Roger Hightower <n7kt@earthlink.net>

56) [5783] YAK- Yet Another Keyer  
by Steven Weber <kd1jv@moose.ncia.net>

57) [5784] Re: 40 meter loops  
by rhiller@sysdev.com (Rick Hiller)

58) [5785] Tonga on 10!  
by tom whalen <whalen@swcp.com>

59) [5786] time  
by tom whalen <whalen@swcp.com>

60) [5787] Lewallen's QRP Xrncvr?  
by eric <epaolin@mail5.clio.it>

61) [5788] Battery power for cool QRP'ing  
by Jim <kj5tf@mctc.com>

62) [5789] RE: Tonga on 10!  
by Kevin Muenzler <wb5rue@stic.net>

63) [5790] QRP Kansas City?  
by Mike - W0TMW <crucis@sky.net>

64) [5791] lat and long. if it's in the call book,ham related???  
by RangerSF5 <RangerSF5@aol.com>

65) [5792] Re: Elmer 101: RF probes  
by "Wayne Barnhart" <wb7whi@triax.com>

66) [5793] Re: O'scope help, pse!  
by Ken Freedman <n1qqv@cshore.com>

67) [5794] Measuring Pico Farids and uHenerys

by Bob <hb\_elec@ids.net>  
68) [5795] Re: Converting Lat/Long?  
by Hank Kohl K8DD <k8dd@contesting.com>  
69) [5796] WQ8RP ARRL DX Contest  
by Hank Kohl K8DD <k8dd@contesting.com>  
70) [5797] Re: Converting Lat/Long?  
by Roger Hightower <n7kt@earthlink.net>  
71) [5798] All day QRN/M on 20 meters!  
by joel malman <malman@world.std.com>  
72) [5799] DK3 Group buy UPDATE!  
by Chris Cartwright <ccart@dns.vidtel.com>  
73) [5800] Req: How to obtain an XE reciprocal license?  
by "Robert P. Okas" <vintage@best.com>  
74) [5801] Re: All day QRN/M on 20 meters!  
by Vic Rosenthal <rakefet@rakefet.com>  
75) [5802] Test (no test)  
by "Robert Roach" <KE4QOK@worldnet.att.net>  
76) [5803] Buzz Not, with an Argosy?  
by ab5uacw@juno.com (Clifton W Sikes)  
77) [5804] Re: All day QRN/M on 20 meters!  
by Mike and Joyce Watson <crucis@sky.net>  
78) [5805] Problem Converting Lat/Long !!  
by "Alan Kaul" <alan.kaul@worldnet.att.net>  
79) [5806] Re: All day QRN/M on 20 meters!  
by "John J. McDonough" <jjmcd@mdn.net>

-----  
Date: Tue, 10 Mar 1998 16:03:41 -0800  
From: Monte Stark <ku7y@dri.edu>  
To: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>  
Subject: [5728] Re: Current,+ to - ???  
Message-ID: <3505D4DD.759E2A42@dri.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Well,

I think it's time everyone went away and read the Handbook for a few minutes!!

In the 1992 issue, look on page 2-4 under the heading "Charge Polarity and Electron Flow".

They talk about Ben Franklin, Edison effect and the fact that electrical engineers have adopted a positive-to-negative convention. It also mentions that "this convention is adhered to in most of the technical

literature."

Use the little "picture" that makes it easiest for you.

But LEARN the important things.... like which lead is + and which is - on your ohm meter! (They can be either way.... and it makes a difference when getting around things like diodes!).

And at the top of the pile is to have fun!! Don't be shy about closing the book and turning on the rig!

cul,

Ron, KU7Y

-----  
Date: Tue, 10 Mar 1998 17:22:57 -0700  
From: Larry East <wlhue@amsat.org>  
To: qrp-1@Lehigh.EDU  
Subject: [5729] Re: Current + to - ??  
Message-ID: <3.0.3.32.19980310172257.00968210@eloi>  
Mime-Version: 1.0  
Content-Type: text/enriched; charset="us-ascii"

>>>>

<excerpt>

I would like to have a dime for every minute wasted trying to figure which

way the juice would go thru those darn Diodes. :^)

</excerpt><<<<<<<

Them little "+" thingies go in the direction of the arrow... Works for me! :-)

-----

Date: Tue, 10 Mar 1998 17:29:04 -0700 (MST)  
From: Paul Harden <pharden@aoc.nrao.edu>  
To: qrp-1@lehigh.edu, gqrp-1@blacksheep.org  
Subject: [5730] GEOMAGNETIC STORM 3-11  
Message-ID: <Pine.SOL.3.91.980310164852.2536A-100000@zia>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Gang,

A geomagnetic storm has begun around 0600Z and predicted to persist another 24 hours, with the A-index expected to hit 30! This will likely trash the HF bands in most latitudes. The actual alert and some explanations are offered below for those interested.

72, Paul NA5N

-----  
>JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
>SDF NUMBER 069 ISSUED AT 2200Z ON 10 MAR 1998

(Portions omitted)

>IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 09/2100Z TO 10/2100Z:  
>THE GEOMAGNETIC FIELD WAS QUIET UNTIL 0600Z. ACTIVE TO MAJOR STORM  
>CONDITIONS HAVE PREVAILED SINCE. SOLAR WIND DATA SHOW A STEADY  
>INCREASE IN SPEED STARTING NEAR 0600Z AND CONTINUING TO A MAXIMUM  
>VALUE NEAR 500 KM/S AT THE END OF THE PERIOD.

The average solar wind is around 200 km/s (125 mi./sec). The solar wind exerts pressure on our magnetic field. When the solar wind suddenly increases, this pressure squashes the magnetic field on the sun facing side even further, wiggling it like Jello. This generates huge electric currents by the dynamo process of a moving magnetic field. These currents flow, along with some of the trapped particle radiation of the solar wind, and enter our poles where the magnetic field is the weakest. This in turn ionizes the D-layer, which will cause high absorption to HF signals. The currents themselves generates the static splashes and bursts you hear.

>OTHER SOLAR WIND DATA  
>SUGGEST THE POSSIBLE SOURCE OF THE ACTIVITY TO BE A HIGH SPEED  
>STREAM ORIGINATING FROM THE SOLAR SOUTHWEST QUADRANT, ALTHOUGH AN  
>EXACT DETERMINATION IS ELUSIVE AT THIS POINT.

A coronal streamer is a sudden release of particle radiation that burrowed itself through a hole in the suns magnetic field. Once it

escapes the sun, it streams outward like a beam of light from a light house (with the motor stuck so it's not rotating!). This finger of dense particles, in this case, has obviously collided with the earth. As above, these particles, riding along the enhanced solar wind, are exerting extra pressure on the earth's magnetic field, causing the geomagnetic storm.

>THE ENHANCED TOTAL FIELD IN THE SOLAR WIND ARGUES FOR A CONTRIBUTION  
>FROM A CME AS WELL.

A CME is a Coronal Mass Ejection, or a solar flare, where some of the solar mass (that is, gobs of particles) are flung out into space. Again, serendipitously slapping into the earth. The fact that they are "guessing" at a CME means it was not observed, even by the SOHO solar satellite, suggesting the CME may be just over the limb of the sun (not optically seen) but the particles ejected get caught in the outward solar wind flow along the sun's open field lines. Some of the arrival times of these events and other observations tend to identify particle radiation from a CME, even though not directly observed.

One scenario could suggest a very active region of the sun that is a day or two away from rotating into view that produced the CME ... meaning it could be a new active region to bother us for the next couple of weeks. If this is true, it will be optically verified in the next two days.

>IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS  
>EXPECTED TO PERSIST AT ACTIVE TO MINOR STORM LEVELS FOR THE MAJORITY  
>OF THE NEXT 24 HOURS. THE DISTURBANCE SHOULD THEN WEAKEN WITH TIME,  
>GIVING WAY TO QUIET TO UNSETTLED CONDITIONS BY THE END OF THE  
>INTERVAL.

The "interval" of the forecast is three days.

>IV. PENTICTON 10.7 CM FLUX  
>OBSERVED 10 MAR 096  
>PREDICTED 11 MAR-13 MAR 099/102/105

All this energy will elevate the solar flux above 100 for some good propagation (if the geomagnetic storm subsides to enjoy it -hi)

>V. GEOMAGNETIC A INDICES  
>OBSERVED AFR/AP 09 MAR 001/003  
>ESTIMATED AFR/AP 10 MAR 025/030

Note how the normal background A-index of 3-4 suddenly jumps to 30, indicating a minor to major storm.

The effects of this geomagnetic storm will worsen the higher in latitude you reside, with predictions of minor storms being posted for the middle latitudes as well (30-45 degrees).

So what is the noise level at your QTH?

72, Paul NA5N

```
-----NATIONAL RADIO ASTRONOMY OBSERVATORY ----- Socorro, New Mexico -----
| VLA - Very Large Array Observatory - Worlds largest radio telescope |
| VLBA - Very Long Baseline Array - even larger |
|------(pharden@zia.aoc.nrao.edu) --- (73 de NA5N) -----
```

```
-----
Date: Tue, 10 Mar 1998 19:58:04 -0500 (EST)
From: kd4zkw <kd4zkw@amsat.org>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [5731] MFJ pacesetter ext power.
Message-ID: <Pine.LNX.3.95.980310195508.3453J-100000@danial.dialisdn.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
```

Hey all,  
I have an MFJ pacesetter that has a jack for external power, 5-9 volts dc. I have a wall transformer, and I have the tiny plugs for it, but I know not the polarity. I just get tired of having to replace the battery every few days. Anyone know the polarity of this plug ? I know, it's in the manual. And the manual, it's in the garbage. Any help ???

```
-----
| Curtis D. Levin kd4zkw | kd4zkw@amsat.org | QRP-L #1488 |
| http://www.diaisdn.net/user/cdlevin |
|-----|
```



Date: Tue, 10 Mar 1998 16:53:05 -0800  
From: W7LS <w7ls@blarg.net>  
To: mikemo@ibm.net  
Cc: qrp-1@Lehigh.EDU  
Subject: [5732] Re: copper foil  
Message-ID: <3505E071.133D@blarg.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Yeah, it's available. A better buy is the aluminum tape, sold at home fixup stores, such as Home Depot, etc. It is sold for repairing leaks in heating vents. Sticky backed aluminum foil. Cheap. GL/73 de Jim, W7LS

Michael Maiorana wrote:

>  
> Does anyone know if you can get thin copper (Cu) foil in rolls, like  
> aluminum foil? I've been thinking (I know, bad idea) about building a  
> vertical for 40 meters. Others have suggested using 33 feet of copper  
> pipe soldered together. I was thinking that if I had a roll of copper  
> foil that was at least 33 feet long, I could get a non conductive core  
> (pvc or wood) and roll the foil onto the core, leaving the bottom of the  
> core exposed for mounting. Solder a lead to the end of the foil and  
> there is my vertical.  
>  
> Ideas?  
> --  
> 72 de kf4trd  
> Mike Maiorana  
> Palm Harbor, FL  
>  
> "And if I have prophetic powers, and understand all mysteries  
> and all knowledge, and if I have all faith, so as to remove  
> mountains, but have not love, I am nothing"

-----  
Date: Tue, 10 Mar 1998 20:26:10 -0500  
From: joel malman <malman@world.std.com>  
To: qrp-1@Lehigh.EDU  
Subject: [5733] Elmer 101: RF probes  
Message-ID: <199803110126.AA18528@world.std.com>

Did anyone else notice the RF probe artical in CQ (March 98), page 60 by Buck Rogers (K4ABT). It's pretty simple.

Question is, will it be sufficient for the Elmer 101 project?

/joel      wa1qvm

-----  
Date: Tue, 10 Mar 1998 19:28:51 -0600  
From: "Adam B. Kanis" <adam-kanis@uiowa.edu>  
To: mikemo@ibm.net  
Cc: qrp-1@lehigh.edu  
Subject: [5734] RE: copper foil  
Message-ID: <3.0.3.32.19980310192851.006d9778@mo1sun.opthth.uiowa.edu>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

mike,

if you're avoiding copper wire because you want to have increased diameter,  
you can use several lengths arranged in a "cage" to yield an effective  
increased diameter.

73,  
--adam

=====  
Adam B. Kanis  
adam-kanis@uiowa.edu  
=====

-----  
Date: Wed, 11 Mar 1998 02:01:40 GMT  
From: mwattcpa@earthlink.net (Marty Watt)  
To: qrp-1@lehigh.edu  
Subject: [5735] Re: copper foil  
Message-ID: <3506f072.10881014@mail.earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: quoted-printable

On Tue, 10 Mar 1998 19:28:51 -0600, "Adam B. Kanis" =  
<adam-kanis@uiowa.edu>  
wrote:

>mike,

>  
>if you're avoiding copper wire because you want to have increased =  
diameter,  
>you can use several lengths arranged in a "cage" to yield an effective  
>increased diameter. =20

I used one of these for a year or so, several years back. Worked like an  
absolute dream. Seemed to output better than input! Always got nice =  
comments  
on strong signals on the MARS state and region nets.

I used an 80m cage dipole with 8 conductors spaced on an 8" pvc form. =  
Used a  
tuner for multi-band operations.

--

72 es 73 de Marty, KM7W

-----  
=46ranklin, Tennessee <http://home.earthlink.net/~mwattcpa> =  
=20  
NorCal #2031 -- ARCI #7514 -- QRP-L #0953 -- AK/QRP #098 -- Grid EM65

-----  
Date: Tue, 10 Mar 1998 21:06:20 -0500 (EST)  
From: Mark S Adams <msadams@acsu.buffalo.edu>  
To: QRP Fanatics <qrp-l@Lehigh.EDU>  
Subject: [5736] Astron Volt Setting HELP  
Message-ID: <Pine.GS0.3.96.980310210031.22026B-1000000@joxer.acsu.buffalo.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Gang,

I just built the battery/power supply box from QRP Classics. Now to set  
the voltage. But where is the adjustment? Inside? I did not get a manual  
with this unit.

6M progress report: The HyGain 64DX beam is built and ready to go up on  
the mast. The TenTec 1208 is working FB. I am cutting the 1/2" hardline  
to a 1/2 Lambda multiple for 50.100MHz right now to feed the antenna. Now  
that I am ready the WX goes from 55F and sunny to 15F and snow. I guess I  
will wait a while.

72, Mark N2VPK

Member of the Buffalo QRP Connection

-----  
Date: Tue, 10 Mar 1998 18:32:15 -0800  
From: chunt@macromedia.com (Christian Hunt)  
To: qrp-1@lehigh.edu  
Subject: [5737] Vertical Antenna Question  
Message-ID: <v02140b03b12ba72ae981@[192.168.22.76]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Greets. I'm looking into building a portable qrp antenna and have looked at the St. Louis Vertical. I have one of the 20' blanks and was curious as to whether or not I can just wind 66' of wire onto the pole to make a 1/2 wave vertical for 40m and then use a tuner for 20 and 15? Or is it more effecient to have the coil and seperate radiator? I plan on feeding it with coax and bnc's, and tuning with a zm-2.

Thanks in advance.

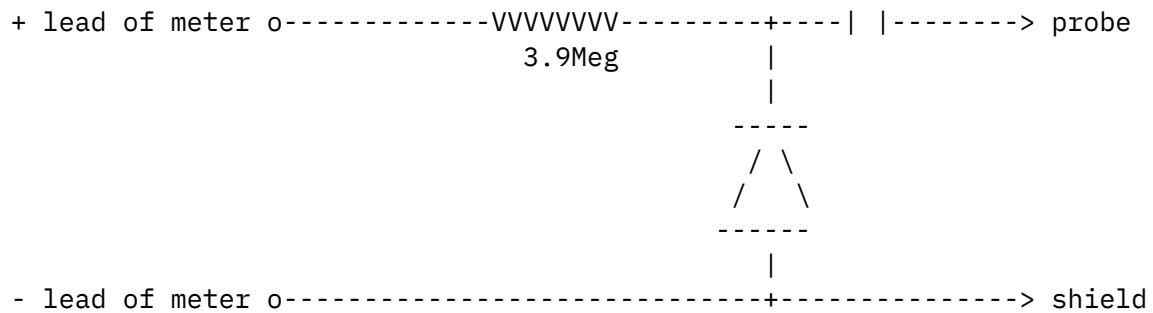
---  
Christian O. Hunt - QA Punk & Unix Demigod  
Macromedia San Francisco - x2314

-----  
Date: Wed, 11 Mar 1998 02:31:17 GMT  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
To: malman@world.std.com  
Cc: qrp-1@lehigh.edu  
Subject: [5738] Re: Elmer 101: RF probes  
Message-ID: <199803110231.CAA08293@chuck.dallas.sgi.com>

Joel et.al.,

I am sure the traffic has already begun on this one, but let me ask questions and let the group vote. :-)

1. Using the RF Probe from March 1998 CQ, page 60, in article by Buck Rogers, K4ABT, author of a Packet Radio book published by MFJ if my memory hasn't gone too bad lately.

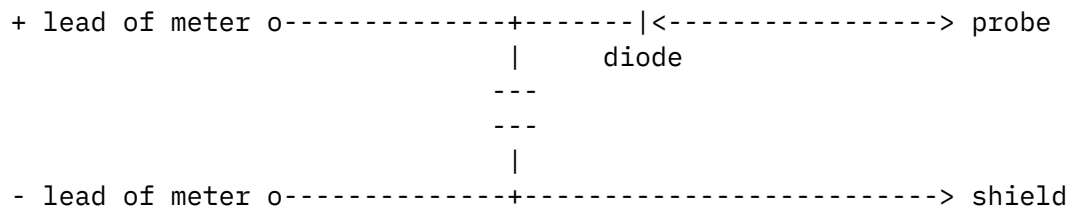


He lists 1N914, 1N4148, or 1N34 for the diode. Cap is 0.005uF.

ARRL Handbook, page 26.11 has one similar with 4.7M for R and 0.01uF and shows only 1N34A for the diode.

- Why the resistor?
- Why the capacitor?
- What is the current through the diode?
- What will be the meter reading from 1mW to 5W if power into a 50 ohm dummy load (non-reactive) connected across the probe?
- Will this probe consume power? and if it does, where does it go?

2. Here is another RF probe.



- Why no resistor?
- Why the capacitor?
- What is the current through the diode?
- What will be the meter reading from 1mW to 5W if ..... (see above)
- Will this probe consume power? and if it does, where does it go?

f. Start with 0.001uF and go to 0.100uF or higher for the cap. What's the difference?

Chuck Adams, K5F0, votes for probe number 2 if you have a high impedance DVM. Not to bias the crowd in any manner.

More questions:

a'. How critical is the shielding?

b'. Why is a 1N34A better for probe number 2? Does a 1N4148 make a big difference? If it does, where and why?

Now everybody get off the couch and into the shack/work area/wherever....  
Can you accurately measure RF using a prototype of both? No fair peaking...

No urban legend postings please. It will take lots of traffic to squash the damage due to someone posting the wrong information. Please. Pretty please, have data to back up any claims.

c'. What is RMS vs peak voltage readings? Which is better?

d'. What frequency responses do you expect and what do you measure.

e'. Ade Weiss in his book has an RF choke between the meter and the diode/cap connection. Why?

OK, back to your regularly scheduled programming now in progress.

Good question Joel, but this list for everyone to test out. :-)

Just when you thought it was safe to go back into the water. ;-)

dit dit

Chuck Adams K5FO Dallas,TX CP-60

<http://reality.sgi.com/adams> [adams@sgi.com](mailto:adams@sgi.com)

-----  
Date: Thu, 12 Mar 1998 20:38:15 cst  
From: wj5o@juno.com (William H. Hays)  
To: QRP-L@Lehigh.EDU, TENTEN-L@Lehigh.EDU  
Subject: [5739] yaesu reflector?  
Message-ID: <19980312.203819.6446.3.WJ50@juno.com>

Not quite this reflector but I've not been able to find the Yaesu reflector. Guess there was a change, since messages bounce.

I would appreciate someone "steering" me in the correct way.

73 Bill WJ50

-----  
You don't need to buy Internet access to use free Internet e-mail.  
Get completely free e-mail from Juno at <http://www.juno.com>  
Or call Juno at (800) 654-JUNO [654-5866]

-----  
Date: Tue, 10 Mar 1998 21:47:51 -0500 (EST)  
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>  
To: towertalk@contesting.com, antennas@qth.net, QRP-L List <qrp-l@Lehigh.EDU>, gqrp-l@blacksheep.org  
Subject: [5740] modeling note  
Message-ID: <Pine.GS0.3.96.980310214119.22167A-100000@moe>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

This one is for those interested in modeling programs. Ran into some questions involving convergence testing of models using very fat elements (large diameters). Ran some systematic test models on MININEC, NEC-2, and NEC-4 and found the comparisons interesting. Nothing earthshattering, but the results are in a new note on converging fat-wire dipoles.

Hope it is of some use to someone.

-73-

LB, W4RNL

L. B. Cebik, W4RNL	/\	/\	*	/	/	/	(Off) (423) 974-7215
1434 High Mesa Drive	/	\	\	----	/	---	(Hm) (423) 938-6335
Knoxville, Tennessee	/\	\	\	/	/		(FAX) (423) 974-3509
37938-4443 USA	/	\	\				cebik@utk.edu
URL: <a href="http://funnelweb.utcc.utk.edu/~cebik/radio.html">http://funnelweb.utcc.utk.edu/~cebik/radio.html</a>							

-----  
Date: Tue, 10 Mar 98 09:26:16 PST  
From: "Roy Lincoln" <cc1595@cocentral.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5741] Fw: Current,+ to - ???  
Message-ID: <MAPI.Id.0016.00633135393520203030303630303036@MAPI.to.RFC822>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="ISO-8859-1"; X-MAPIextension=".TXT"  
Content-Transfer-Encoding: quoted-printable

-----

> Date: Tuesday, March 10, 1998 09:20:35  
> From: cc1595  
> To: "Low Power Amateur Radio Discussion" <Low Power Amateur Radio Discu=  
ssion>  
> Subject: Fw: Current,+ to - ???  
>  
>  
>  
> -----

> > Date: Tuesday, March 10, 1998 09:16:38  
> > From: cc1595  
> > To: ku7y@dri.edu  
> > Subject: Re: Current,+ to - ???  
> >  
> > Hi Ron(and the gang!) Picture the solar system! Now picture the outer  
> planets  
> > like Uranus, Neptune, Pluto. They are in the outer valence bands.Fart=  
hest  
> from  
> > the sun.More easily dislodged from orbit when an electromotive  
> > force(voltage)is applied.They are to the solar system(giant atom) as =  
the  
> > electrons are in atoms that are dislodged and form an electric curren=  
t.They  
> > are dislodged into the next or adjacent solar system(atom)while a  
> > corresponding electron there is dislodged into the next ,and so on.Th=  
is  
> theory  
> > is called electron flow and is the only theory that i am aware of tha=  
t can  
> be  
> > used to understand how a vacuum tube operates.It was taught by the =  
Navy in  
> the  
> > mid 60's when i went to sonar school.I was given to understand that =  
it was  
> the  
> > theory that "technicians" learn and use while the more esoteric  
> > types(engineers) learned the positive to neg., or conventional theory=  
.  
> > Actually i guess if you are consistent in the way you apply it,either=  
would  
> > produce the desired result. I prefer the electron flow theory and it =  
does  
> seem  
> > to be in harmony with scientific methods of the latter 20th century. =



> > Roy Lincoln WA4DOU QRP ARCI#2330 SK  
> >  
> > -----  
> > > Well,  
> > >  
> > > I think it's time everyone went away and read the Handbook for a =  
few  
> > > minutes!!  
> > >  
> > > In the 1992 issue, look on page 2-4 under the heading "Charge Polar=  
ity  
> > > and Electron Flow".  
> > >  
> > > They talk about Ben Franklin, Edison effect and the fact that elect=  
rical  
> > > engineers have adopted a positive-to-negative convention. It also  
> > > mentions that "this convention is adhered to in most of the technic=  
al  
> > > literature."  
> > >  
> > > Use the little "picture" that makes it easiest for you.  
> > >  
> > > But LEARN the important things.... like which lead is + and which =  
is -  
> > > on your ohm meter! (They can be either way.... and it makes a diffe=  
rence  
> > > when getting around things like diodes!).  
> > >  
> > > And at the top of the pile is to have fun!! Don't be shy about clos=  
ing  
> > > the book and turning on the rig!  
> > >  
> > > cul,  
> > >  
> > > Ron, KU7Y  
> > >  
> >  
>

-----  
Date: Tue, 10 Mar 1998 22:07:28 EST  
From: AA3BP <AA3BP@aol.com>  
To: qrp-l@lehigh.edu  
Subject: [5742] O'scope help, pse!

Message-ID: <24c76f87.3505ffff@aol.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

Ok..., I just took delivery of that \$250 TechAmerica 20 mhz scope that many of you have been talking about. It "looks" real nice and my life long fantasy of actually owning a scope is finally realized. Problem: now what do I do with it?

The manual isn't very good and assumes that one intuitively knows all the jargon and how to hook it up. I figured out how to calibrate it and test components (which makes no sense since I already know the difference between a resistor and a capacitor -- beyond which knowing that its small, medium, or larger doesn't seem to be much use. So, I'm sure there's some other applications consistent with QRP homebrewing that I can use this thing for.

Anyway, I want to learn how to use it to align and troubleshoot QRP xcvrs, rcvrs, etc. Can anyone recommend any "how to" books/articles (for dummies) that a beginner like me could understand? General publications such as the Handbook don't provide any useful specifics.

For those of you wondering why I would buy something that I couldn't use, the answer is simple. I had to start somewhere!

Thanks in advance for any advise.

73,

Jim, AA3BP

-----  
Date: Wed, 11 Mar 1998 03:17:11 -0500  
From: "Rich Dailey, KA8OKH" <ka8okh@som-uky.campus.mci.net>  
To: qrp-l@Lehigh.EDU  
Subject: [5743] Plus to Minus, Minus to Plus  
Message-ID: <3.0.16.19980311023452.2f7707fc@som-uky.campus.mci.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

I'll believe it when I see it.

All I know is that when the smoke comes out, it stops workin.

And I've seen that happen a lot.

...Rich

Rich Dailey, KA8OKH <ka8okh@som-uky.campus.mci.net>  
The KA8OKH / KB4NPI Web - <http://www.qsl.net/ka8okh>

-----  
Date: Tue, 10 Mar 1998 21:20:10 -0600  
From: Chuck Carpenter <w5usj@webwide.net>  
To: kd4zkw <kd4zkw@amsat.org>  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [5744] Re: Current,+ to - ???  
Message-ID: <3.0.1.32.19980310212010.00698b50@mail.webwide.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>Most electronics people don't use an ammeter to troubleshoot. They use  
>a voltmeter. Or an ohm meter. Again, simply measuring for potential.

Yea, but, your good ole voltmeter is measuring the current flowing through  
a known resistor value. Same thing with the ohmmeter except the current  
is flowing in an \*unknown\* resistor. The meter, calibrated in voltage or  
resistance, is measuring current. It's difficult to measure voltage or  
resistance unless there is current flowing, even though it be only a tiny  
amount.

72/73 -- Chuck, W5USJ, EM22cv  
Rains County, Eagle Capitol of Texas  
ARCI # 5422, QRP-L # 1306, FISTS # 3984

-----  
Date: Tue, 10 Mar 1998 10:37:55  
From: Dale LeDoux <dledoux@laci.net>  
To: qrp-l@Lehigh.EDU  
Subject: [5745] Plusses and Minuses  
Message-ID: <3.0.1.16.19980310103755.2cbf2d60@laci.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

In the course of my daily business I occasionally have need to convert AC  
to DC (funny how useful that trick is...) and I put together a little box,

black, of course, with a bridge rectifier inside. On the outside, I put two yellow binding posts at one end and a red and a black one at the other end. One day while using this little thingie, an electrician from the client's staff stopped by and questioned as to the function of the box. I told him it was an electric sorter. You put mixed electricity in the yellow end, and positrons came out the red pole and electrons came out the black pole. His reply to my comment was mainly unprintable.

Doesn't it make sense, though, if an electron is a mass with a negative charge, then a hole is the opposite of that, a space with a positive charge, i.e., a positron? And then positrons come out the end of the diode that the little arrow points to...

dale  
KD5QI

-----  
Date: Wed, 11 Mar 1998 03:49:44 GMT  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
To: qrp-1@Lehigh.EDU  
Subject: [5746] Re: Plusses and Minuses  
Message-ID: <199803110349.DAA08488@chuck.dallas.sgi.com>

OK Gang,

You asked for it and you are going to get it. :-)

In copper:

- a. One conduction electron per atom.
- b.  $8.5 \times 10^{28}$  atoms per cubic meter.

Let's say we have one ampere through a wire with a cross-section of one square millimeter.

Can you show that the electrons move at a velocity of 0.26 meters per hour?

These type questions are good for E&M (Electricity and Magnetism) quizzes. Also PhD qualifiers. :-)

I got another one for you too. When we do experiments on light, when we measure for an electromagnetic wave we get one. When we measure for

a photon we get one? How do they know that? ;-)

FYI

Chuck Adams K5FO Dallas,TX CP-60  
<http://reality.sgi.com/adams> [adams@sgi.com](mailto:adams@sgi.com)

-----  
Date: Wed, 11 Mar 1998 04:13:39 GMT  
From: [adams@chuck.dallas.sgi.com](mailto:adams@chuck.dallas.sgi.com) (Chuck Adams)  
To: [qrp-1@lehigh.edu](mailto:qrp-1@lehigh.edu)  
Subject: [5747] Trivial Pursuit for Dweebs (tm)  
Message-ID: <199803110413.EAA08540@chuck.dallas.sgi.com>

Gang,

While I'm off on a tangent like the rest of the group. :-)

I remembered something from the "Radio Communication Handbook" published by the RSGB (a very good book by the way even though as a native Texan I can't get used to the small rectangles for resistors :-)) and thought I'd ask the group at large. I'm sure we have a number of professionals who work in this area.

On page 16.21 in the section on printed circuit boards there is a formula:

$$I = 3 * \text{cube\_root}(w * w)$$

where I is recommended current density in amps and w is the width of the copper track in millimeters (my spelling on mm).

Anyone have a derivation or source for this formula? Any variations due to solder masks?

Some time back someone asked the question about using a PC board trace for a fuse. Well, if you look closely in the MFJ 9XXX series there is such a critter. But then replacement is another issue. I'm sure someone did the experiment. Some of us have done similar experiments on a workbench with loose clippings from component leads. Sad but true..... :-)

I don't recall any such mention in the ARRL handbook.

So those with time on their hands and PC board facilities could make up some traces of various widths on a scrap piece of board and do some destructive testing. Safety is a first priority at all times though.

FYI

Chuck Adams K5FO Dallas,TX CP-60  
<http://reality.sgi.com/adams> [adams@sgi.com](mailto:adams@sgi.com)

-----  
Date: Tue, 10 Mar 1998 19:14:25 -0900  
From: Bruce Hopkins - KL7JAF <[kl7jaf@polarnet.com](mailto:kl7jaf@polarnet.com)>  
To: [adams@chuck.dallas.sgi.com](mailto:adams@chuck.dallas.sgi.com)  
Cc: [qrp-1@Lehigh.EDU](mailto:qrp-1@Lehigh.EDU)  
Subject: [5748] Re: Plusses and Minuses  
Message-ID: <[v03007801b12bbc5cd905@\[204.119.24.139\]](mailto:v03007801b12bbc5cd905@[204.119.24.139])>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

snip...

>I got another one for you too. When we do experiments on light, when  
>we measure for an electromagnetic wave we get one. When we measure for  
>a photon we get one? How do they know that? ;-)

>

>FYI

>

>Chuck Adams K5FO Dallas,TX CP-60  
><http://reality.sgi.com/adams> [adams@sgi.com](mailto:adams@sgi.com)

Hi Chuck...

Is this another one of those unanswerable Zen tingums like the Thermos  
??? I mean like this has to be the most marvelous magic invention of all  
times!!! You put hot things in, they come out hot... You put cold things  
in, they come out cold... How do it know ???

Take care and have fun...

P.S.

"Tingum" is the Bahamian word for anything that you can not recall  
the name of at the moment... If you can't remember the word "Tingum", just  
say "Um Um" until you do... It comes out them "Um Um . . . Tingum"

"Alaska QRP Club" - Web Site: <http://www2.polarinet.com/~bhopkins/akqrp>

\*\*\*\*\* ALASKA QSO PARTY - MARCH 21ST & 22ND 1998 \*\*\*\*\*  
See AKQRP Web Site for Details

-----  
Date: Tue, 10 Mar 1998 19:35:38 -0800  
From: dave\_epps@juno.com  
To: qrp-1@Lehigh.EDU  
Subject: [5749] Nova-42  
Message-ID: <19980310.204011.12446.1.dave\_epps@juno.com>

Radio Shack has the Nova-42 earphones on sale for \$9.95.  
Has an inline volume control.  
dave ab5pc fresno, ca.

-----  
You don't need to buy Internet access to use free Internet e-mail.  
Get completely free e-mail from Juno at <http://www.juno.com>  
Or call Juno at (800) 654-JUNO [654-5866]

-----  
Date: Wed, 11 Mar 1998 04:42:00 GMT  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
To: qrp-1@lehigh.edu  
Subject: [5750] Help with laptop  
Message-ID: <199803110442.EAA08648@chuck.dallas.sgi.com>

Gang,

I have a DELL NL20 laptop and I'm about to do some serious travelling to CA over the next eight weeks. What this means is that I have undertaken a project whereby the laptop goes everywhere. But it needs two things:

1. Some more memory, so any help on locating some would be appreciated.

2. And a version of 'vi', my favorite editor, that will use the extended memory to allow me to work on large files.

This is QRP related BTW.

Many many thanks in advance. I know with all the computer people on the list there has got to be someone somewhere that can help little 'ole me.

This laptop didn't cost me a whole heck of alot so it's no great loss if I don't find the memory, it's just an aggravation breaking up files to work on them or creating bits and pieces and moving them to a real computer. :-)  
Not picking on Dell, they make great computers. No flame wars please..... pretty please.....

dit dit

Chuck Adams K5FO Dallas,TX CP-60  
<http://reality.sgi.com/adams> [adams@sgi.com](mailto:adams@sgi.com)

-----  
Date: Tue, 10 Mar 1998 23:41:47 -0500  
From: Hank Kohl K8DD <k8dd@contesting.com>  
To: qrp-l@lehigh.edu  
Subject: [5751] Dayton Rooms.....  
Message-ID: <3.0.1.32.19980310234147.006b30d4@192.0.0.1>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Just uploaded the new "confirmed list" to:  
<http://www.geocities.com/CapeCanaveral/2844/98rooms.htm>

If you see your call in RED and bold type, you have said you talked to Days Inn and are confirmed with them.

If you see your call in BLACK and not bold type, you have not called Days Inn and are not confirmed with them. After March 15 we will assume that you do not want the room and it will go into the standby pool.

The standby pool will be moved up to the room list soon next week. There will be rooms available for one of the biggest, if not the biggest, hamfest/swap & shop/convention/display of Amateur Radio.



AND - in person - live, in color - the new improved whatchamacallit  
from NorCal at the "QRP Hotel", Days Inn South.

73      Hank      K8DD

\*/      Hank Kohl    K8DD            k8dd@contesting.com  
\*/      ARRL TS                    (k8dd@tir.com)  
\*/      G-QRP          ARRL/LM       QCWA/LM       QCAO/LM  
\*/      QRP-ARCI - Director    MI-QRP - Vice Pres.  
\*/      <http://www.QRPARCI.org>  
\*/      <http://www.geocities.com/capecanaveral/2844/miqrp.htm>

-----  
Date: Wed, 11 Mar 1998 05:17:50 GMT  
From: mwattcpa@earthlink.net (Marty Watt)  
To: qrp-1@lehigh.edu  
Subject: [5752] Unbuilt kits for trade (complete station!)  
Message-ID: <35061ae2.21746833@mail.earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: quoted-printable

I have three unbuilt kits that it doesn't look like I'll have the =  
opportunity  
to put together. I'd like to swap them for something nice -- a high =  
quality  
set of paddles, or a lesser quality set of Vibroplex Brass Racers and a =  
nice  
CMOS Superkeyer III, a good multi-band mobile antenna, a small DC-30Mhz+  
O-scope, a Sierra, a Kenwood TS-40 or small Astron 35 amp switching power  
supply, or ... be creative. The possibilities are there. Maybe a =  
digital  
camera, or flatbed scanner, or ... I'm not particularly interested in the=  
MFJ  
QRP equipment. One of their "box" antennas, however ...

What I have is a 38 Special, a St. Louis Tuner, and a NorCal K8FF Paddles  
(wide spacing). All are completely unbuilt, most haven't even had parts  
inventoried. I also have a 7AH gel cell to add to the set. The package =  
cost  
for all these would have been around \$175 at original cost, and you can't=  
get

the 38 Special or St. Louis Tuner kits anymore.

I just don't have the time to build them. And my preference is for =  
trades,  
not cash deals (cash would have to pay bills, my wife tells me, so trades=  
are  
\*much\* preferred).

IMPORTANT:

I'll be away from the computer March 14-22, so let me know by Friday, =  
March  
13, and I'll take next week to evaluate offers. Back on Monday March 23.

I hope I don't regret this ... <g>.

PLEASE ... no posts to the list. Private e-mail only, please.

--

72 es 73 de Marty, KM7W

-----  
=46ranklin, Tennessee <http://home.earthlink.net/~mwattcpa> =

=20

NorCal #2031 -- ARCI #7514 -- QRP-L #0953 -- AK/QRP #098 -- Grid EM65

-----

Date: Tue, 10 Mar 1998 22:27:30 +0000  
From: Roger Hightower <n7kt@earthlink.net>  
To: qrp-l@Lehigh.EDU  
Subject: [5753] Solder fume fix es other things  
Message-ID: <3505BE52.1064483C@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

After reading Marshall Emm's post last week about having the LDG tuner  
kits in stock, I decided to order something so I could justify sniffing  
solder fumes. XYL looks at me with a jaundiced eye if I'm inhaling and  
there's no PC board there, :-)

Anyhoo, ordered the QRP autotuner and the 4:1 balun kit from Milestone  
Technologies. No discount of course; didn't expect one. I e-mailed the  
order on Friday, 3/6, and Marshall called me that same day to confirm.  
On Monday, the mailman stopped by and said "Roger, here's another kit  
for you"....he knows me pretty well now.

I'm impressed. Fast service, and the shipping was less than LDG would

have charged me. Finished up the kits today, and am enjoying them.

Got my fix, and can now wait for Elecraft or whoever to come out with another reason to melt solder. No connection with MTechnologies other than being a more than satisfied customer. Check 'em out if you have the urge to build something. <http://www.mtechnologies.com/index.html>

72.....de Roger, N7KT

-----  
Date: Tue, 10 Mar 1998 22:06:19 -0800  
From: "ALAN KAUL" <alan.kaul@worldnet.att.net>  
To: <qrp-1@lehigh.edu>  
Subject: [5754] MARS PATHFINDER (qrp but not amateur radio)  
Message-ID: <19980311060631.AAA27842@oemcomputer>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Mars Pathfinder was pronounced "dead" today at 1:21pm Pacific Time

Scientists at Jet Propulsion Laboratory in Pasadena sent a series of radio commands at 10:53:46 am PST ... and waited for the "return" signal from Pathfinder's low-power radio which was due at 11:35:06 am. The time passed without a response.

At 11:50:20 am PST, Pathfinder Project Manager Brian Muirhead clicked the computer mouse that started the last ''wake up'' sequence for Pathfinder --- it was a repetetive series of signals sent for 50-minutes. And at 1:21pm, when nothing was heard, JPL scientists in Mission Control declared it dead. Later at a news conference, Muirhead speculated that it was probably the extreme cold on Mars which ultimately caused the probe not to answer. Even though it's batteries died months ago, scientists had hoped PATHFINDER would be able to operate using the solar panels. But they theorized today that the cold caused a failure of some small part, perhaps a resistor, a capacitor or even a solder joint -- preventing the onboard receiver from ever hearing the signal to turn on the transmitter. For the record, the batteries were designed for

30-days and actually provided signal for 83-days. Nothing had been heard from the space craft for months.

The next mission to the surface of Mars is in 1999 (and using different types of batteries, the life expectancy is on the order of 1-year). A mission in 2001 is expected to retrieve Mars rocks which will be picked up and returned to Earth (by another mission) in 2005.

(((( I attended the session at Jet Propulsion Laboratory today in which NASA attempted to turn on the transmitter on board Pathfinder on the surface of Mars. The signals to the Mars lander took about 20 minutes, and had there been a return signal, it would also have taken that long. A few details are provided here in case your morning paper leaves them out! Pathfinder - RIP!)))

For those of you offended by the bandwidth, I apologize -- just consider it my form of electron-migration-mania.

73/72 de Alan Kaul, W6RCL, LaCanada-Flintridge, CA  
<http://home.att.net/~alan.kaul/qrp.html>  
[alan.kaul@worldnet.att.net](mailto:alan.kaul@worldnet.att.net)  
[w6rcl@amsat.org](mailto:w6rcl@amsat.org)

-----  
Date: Tue, 10 Mar 1998 22:43:33 -0800  
From: "Wayne Barnhart" <wb7whi@triax.com>  
To: <adams@chuck.dallas.sgi.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [5755] Re: Elmer 101: RF probes  
Message-ID: <199803110645.WAA08255@smtp.triax.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

I posted this before but guess it got missed. The november 1996 issue of 73 on page 17 has an article for designing RF probes and why what components go where. I built the probe and it compares favorably with my swr meter. The VOM gives you Vrms. Since I was feeding a dummy load I determined power out as Vrms ^2 /50ohms. The resistance is based on the DC input resistance of your meter. For my VOM it was 10Mohms. According to the article the resistor must reduce the peak level of the Rf

voltage at the tip to the desired RMS level (peak voltage of a sine wave is 1.414 times  $V_{rms}$ ). The resistor has to drop the excess voltage. According to the article the calculation of the resistor for a 10Mohm meter is as follows...

$10,000,000 \times 1.414 = 14,140,000$   
 $14,400,000 - 10,000,000 = 4,400,000$  ohms or 4.4Mohms.

The resistor needs to be 4.4Mohms

the probe will work for analog meters as well as long as you know the input resistance.

Wayne WB7WHI  
Spokane, Wa.

-----  
> From: Chuck Adams <adams@chuck.dallas.sgi.com>  
> To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
> Subject: Re: Elmer 101: RF probes  
> Date: Tuesday, March 10, 1998 6:31 PM  
>  
> Joel et.al.,  
>  
> I am sure the traffic has already begun on this one, but let  
> me ask questions and let the group vote. :-)  
>  
> 1. Using the RF Probe from March 1998 CQ, page 60, in article by  
> Buck Rogers, K4ABT, author of a Packet Radio book published by  
> MFJ if my memory hasn't gone too bad lately.

-----  
Date: Wed, 11 Mar 1998 00:28:12 -0700 (MST)  
From: Paul Harden <pharden@aoc.nrao.edu>  
To: ALAN KAUL <alan.kaul@worldnet.att.net>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5756] Re: MARS PATHFINDER (qrp but not amateur radio)  
Message-ID: <Pine.SOL.3.91.980311000906.25603A-100000@zia>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Tue, 10 Mar 1998, ALAN KAUL wrote:

> Mars Pathfinder was pronounced "dead" today at 1:21pm Pacific Time

As QRPers, we all admire these "rigs," whether commercial or homebrew. While basically electronics and hardware, they do take on a persona. When a rig dies, it's like losing a friend. Losing the PATHFINDER is a "rig" that died. Think of the anguish the thousands of engineers, technicians and operators who worked on the project have to know their hard work came to an end because it died. They lost a friend. I think we all have a reverence when a good rig dies. I'll have a tear in my eye when the signals from Voyager someday dies. Like a generation coming to an end.

> For those of you offended by the bandwidth, I apologize -- just consider it  
> my form of electron-migration-mania.

I believe most QRPers are more than couch potatoes ... we all have an interest in other things, particularly science, and want to learn more. Thanks for sharing it with us, and that you were an eyewitness to the last attempt to "make contact." The somber mood at JPL must have been quite an impression.

72, Paul NA5N

-----

Date: Wed, 11 Mar 1998 06:19:52 -0500  
From: Peter\_Simpson@ne.3com.com  
To: qrp-1@Lehigh.EDU  
Subject: [5757] Topo Maps on CDRom  
Message-ID: <852565C4.003CE9E3.00@usboxmta.ne.3com.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII

Being a nerdy kinda guy, I have a bunch of toys. One of them is a GPS receiver. It has a port on the back to talk with a computer, so what did I do? Yup, went off and bought some nifty software (Fugawi...get it?) that plots your position on a map. What map, you ask? Why, any map you can scan into a TIF image file!

Our federal government has done the scanning for us in the case of topo maps, and sells them on CD at quite a reasonable

price...\$32 each, plus \$3.50 handling per order. Each CD contains all the maps in a 1 degree by 1 degree area, that's 64 1:24000 maps, 2 1:100,000 and one 1:250,000 map. Should be enough for anyone. I found my QRPTTF site on the one I have. (That's \$0.50 per map, the paper ones are about \$2.50 each, I think)

Fugawi: <http://www.fugawi.com>

USGS: <http://mapping.usgs.gov/esic/cdrom/cdlist.html#DRG>

By the way...there's lots of neat mapping data on the USGS server. Some of it is free for the downloading, like the 1:100,000 digital line graph maps and a viewer for them, DEM data (elevations every 3 arc-seconds) and there's a neat aerial photo search tool I used to get a photo of my town for \$20 or so.

Happy Mapping!

Peter, KA1AXY

-----  
Date: Wed, 11 Mar 1998 06:40:13 -0500  
From: "Peter Orban" <peter@peter237.imti.nrc.ca>  
To: qrp-1@lehigh.edu  
Subject: [5758] FT-101  
Message-ID: <9803110640.ZM17404@peter237.imti.nrc.ca>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

I would like to thank everyone who advised me on the radio.  
I have not made up my mind yet.

Thanks again, Peter, VE3PEY

--  
--

Peter E. Orban  
National Research Council of Canada  
e-mail: [peter.orban@nrc.ca](mailto:peter.orban@nrc.ca)

-----  
Date: Wed, 11 Mar 1998 05:55:33 -0600  
From: k5zty@juno.com (Bill Stietenroth)  
To: qrp-1@lehigh.edu  
Subject: [5759] re: current flow + to - ??  
Message-ID: <19980311.055547.6750.1.k5zty@juno.com>

This was one of the early attempts at political correctness, and as political correctness usually does it left a screwed up mess. When later discoveries showed that old Ben Franklin was wrong, nobody wanted to besmirch his name so they concocted a theory that made both ideas right.  
Bill, K5ZTY  
Houston, TX  
k5zty@juno.com

-----  
You don't need to buy Internet access to use free Internet e-mail.  
Get completely free e-mail from Juno at <http://www.juno.com>  
Or call Juno at (800) 654-JUNO [654-5866]

-----  
Date: Wed, 11 Mar 1998 06:21:12 -0600  
From: k5zty@juno.com (Bill Stietenroth)  
To: AA3BP@aol.com  
Cc: qrp-1@lehigh.edu  
Subject: [5760] Re: O'scope help, pse!  
Message-ID: <19980311.064147.6734.0.k5zty@juno.com>

The "How To Use An Oscilloscope" parts one and two by Paul Harden, in the QRPP would be a good place to start.  
Bill, K5ZTY  
Houston, TX  
k5zty@juno.com

-----  
You don't need to buy Internet access to use free Internet e-mail.  
Get completely free e-mail from Juno at <http://www.juno.com>  
Or call Juno at (800) 654-JUNO [654-5866]

-----



Date: Wed, 11 Mar 1998 06:41:02 -0600  
From: k5zty@juno.com (Bill Stietenroth)  
To: chunt@macromedia.com  
Cc: qrp-1@Lehigh.EDU  
Subject: [5761] Re: Vertical Antenna Question  
Message-ID: <19980311.064147.6734.1.k5zty@juno.com>

It's not that simple Christian. 66 ft of wire rolled up into a coil doesn't do the same job as 66 ft stretched out in a straight line. There is a great article on the 20 ft fishing pole antenna in the Spring 97 issue of QRPp. Read it before you spend any effort or money on the vertical. A transmatch will load your transmitter into most anything but that doesn't necessarily make the load an antenna.

---

You don't need to buy Internet access to use free Internet e-mail.  
Get completely free e-mail from Juno at <http://www.juno.com>  
Or call Juno at (800) 654-JUNO [654-5866]

---

Date: Wed, 11 Mar 1998 06:17:43 -0700  
From: Jess Gypin <jessqrp@concentric.net>  
To: k5zty@juno.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5762] Re: Vertical Antenna Question  
Message-ID: <35068EF7.680A9C1C@concentric.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

HI there,

I have a good working and cheap mod to the SLV on my web page, url at the bottom. Also, the SLV article in its entirety can be found on the Norcal web page at

<http://fixnet.com/jparker.norcal.htm>

I have used the original version of this and the performance is marginal on 40 meters. If you just put the inexpensive coil that I came up with, or buy the W6MMA coil, the antenna is a real performer. If you need more information, please feel free to give a holler.

Best

Bill Stietenroth wrote:

> It's not that simple Christian. 66 ft of wire rolled up into a coil  
> doesn't do the same job as 66 ft stretched out in a straight line. There  
> is a great article on the 20 ft fishing pole antenna in the Spring 97  
> issue of QRPP. Read it before you spend any effort or money on the  
> vertical. A transmatch will load your transmitter into most anything but  
> that doesn't necessarily make the load an antenna.  
>  
> -----  
> You don't need to buy Internet access to use free Internet e-mail.  
> Get completely free e-mail from Juno at <http://www.juno.com>  
> Or call Juno at (800) 654-JUNO [654-5866]

--

Jess N0TFI <><

<http://www.concentric.net/~jessqrp> Personal Home page

<http://qsl.net/N0TFI> Fox Audio Page

-----  
Date: Wed, 11 Mar 1998 09:17:33 -0500  
From: cooper@gmpvt.com (Tom Cooper)  
To: qrp-1@Lehigh.EDU  
Subject: [5763] Argo 509 RF gain  
Message-ID: <199803111417.JAA15404@web.gmpvt.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

A couple of years ago I bought an Argo 509 that I have been loaning out to new hams to get them interested in QRP CW. It seems to be working 100%! In any case, I have been fixing a couple of things on the rig and noticed that when the rf gain is advanced beyond 3 o'clock, the noise level goes way up, without an increase in sensitivity. It is very easy to hear on 10M. Because of the AGC popping, I've found that leaving the rf gain in the 9 to 12 o'clock range is the best, anyway.

Has anyone else noticed this?

Tom W1EAT

-----  
Date: Wed, 11 Mar 1998 08:16:06 -0600  
From: "ukii" <ukii@megsinet.net>  
To: "qrp-1" <qrp-1@Lehigh.EDU>  
Subject: [5764] Converting Lat/Long?  
Message-ID: <006601bd4cfa\$01b02d20\$b04e85d0@ns1.megsinet.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hello Gang.  
Well,I certainly dont want this question to become a  
lesson in trigonometry but...  
I am trying to enter my coordinates in a logging program.  
I got my lat/long off of a Buckmaster callbook at they use  
something like 87.8904N. My problem is that I need to convert  
that to minutes/seconds which is what the callbook needs.  
Trying to enter 87.8904 gives the error,OUT OF RANGE  
Minutes/SECONDS to 59.  
Please,can one of you A+B=Fruitsalad people convert the following?  
41.9014 N and 087.6723 W to a minutes second deal.

Also,on a recent thread started by someone....  
>??? I mean like this has to be the most marvelous magic invention of all  
times!!! You put hot things in, they come out hot... You put cold things  
in, they come out cold... How do it know ???  
>  
sounds like my microwave! Is that right Chuck?  
Where is NilsBul,anxiously awaiting his answer  
on the Pos/Neg deal!!!! Maybe he is having trouble converting  
"big words" to "small words"???

Thanks Much Gang.  
73 de john  
n9ukx

-----  
Date: Wed, 11 Mar 1998 07:47:17 -0700  
From: Brad Mugleston <bmug@gwl.com>  
To: "'qrp-1@lehigh.edu'" <qrp-1@lehigh.edu>  
Subject: [5765] Help  
Message-ID: <01BD4CC1.EB21C560@pps-pc10.gwl.com>

Gang,

I have two swap fests coming up soon (one is this Saturday) and I need to purchase a new rig. I am looking for something smallish for car camping with the Boy Scouts - we will be going to Lake Powell this summer and I have been asked to go along and help with some merit badges. My basic requirements are relatively small size (TS-440ish), 12V, CW & Voice, all 9 bands (I don't want to be without 30M) and possibly a general coverage receiver.

Could you Email me direct your favorite(s) and approximate price I should expect to pay? I need it quickly as of course I'm late getting this request out.

See below.

Thanks

de KB0ROL, Brad

Make:  
Model:  
Bands:  
Modes:  
Power Out:  
Approx. Size (W X H X D):  
Swap Fest Price:  
Features:  
Comments:

-----  
Date: Wed, 11 Mar 1998 07:52:41 -0700  
From: Brad Mugleston <bmug@gwl.com>  
To: "'qrp-1'" <qrp-1@Lehigh.EDU>  
Subject: [5766] Elmer101  
Message-ID: <01BD4CC2.ABC32020@pps-pc10.gwl.com>

OK, someone just told me it's March and I only have about one month left until I can come out of this hole I'm working in.

Has the Elmer class started yet? I've got CirCad up and running but I don't have my kit yet. Has anything changed? When are we planning on starting?

I NEED A RADIO FIX - PLEASE HELP!!!!!!

de KB0ROL, Brad

-----  
Date: Wed, 11 Mar 1998 10:23:39 -0500  
From: "Buck, Preston D" <BuckPD@corning.com>  
To: "'qrp-1@Lehigh.EDU'" <qrp-1@lehigh.edu>  
Subject: [5767] Re: Current,+ to - ???  
Message-ID: <6B137F61081DD0118DF600805FEAC5C5FF1FC1@SILVER.CORNING.COM>  
Content-Return: allowed  
Mime-Version: 1.0  
Content-Type: text/plain

This is a good clue as to why so many freshman EE students graduate with other majors. After the conventional/hole/electron current flows discussions come Fourier Transforms followed by convolution (or is it the other way around, I forget). Soon enough, those EE students without a good memory and a strong will are questioning their career plans. (I had a strong will.) One friend of mine started out as a EE/CompE freshman, became a Comp Sci sophomore, then a Business sophomore, then he became a Domino's delivery driver and that's the last I heard of him.

It would have been easier and more fun had we been able to relate the theory we learned to something practical right away, kind of like the Elmer 101 project will be. But most the profs didn't seem to think so. One prof (a Kris Kristoferson twin) though taught us how to design computers from the transistor level up, now that was fun.

73

Preston, n0g1m, Southern NY State

My words, not my employer's

-----  
Date: Wed, 11 Mar 1998 11:12:47 -0500 (EST)  
From: kd4zkw <kd4zkw@amsat.org>  
To: ukii <ukii@megsinet.net>  
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>

Subject: [5768] Re: Converting Lat/Long?  
Message-ID: <Pine.LNX.3.95.980311111148.3453R-1000000@danial.dialisdn.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 11 Mar 1998, ukii wrote:

> Hello Gang.  
> Well, I certainly don't want this question to become a  
> lesson in trigonometry but...  
> I am trying to enter my coordinates in a logging program.  
> I got my lat/long off of a Buckmaster callbook at they use  
> something like 87.8904N. My problem is that I need to convert  
> that to minutes/seconds which is what the callbook needs.  
> Trying to enter 87.8904 gives the error, OUT OF RANGE  
> Minutes/SECONDS to 59.  
> Please, can one of you A+B=Fruitsalad people convert the following?  
> 41.9014 N and 087.6723 W to a minutes second deal.

<http://www.amsat.org> has a calculator that will figure lat/lon  
in degrees, or min/sec from degrees. It will also give you  
your grid square. 73.

-----  
| Curtis D. Levin kd4zkw | kd4zkw@amsat.org | QRP-L #1488 |  
<http://www.diaisdnet.net/user/cdlevin>

-----  
Date: Wed, 11 Mar 1998 18:01:24 +0200  
From: Arjen Raateland <Arjen.Raateland@vyh.fi>  
To: wb7whi@triad.com, QRP-L <QRP-L@lehigh.edu>  
Subject: [5769] Re: Elmer 101: RF probes  
Message-ID: <3506B554.2E6D@vyh.fi>  
MIME-version: 1.0  
Content-type: text/plain; charset=us-ascii  
Content-transfer-encoding: 7bit

Wayne Barnhart wrote:

> According to the article the resistor must reduce the peak level of the Rf  
> voltage at the tip to the desired RMS level (peak voltage of a sine wave is  
> 1.414 times Vrms). The resistor has to drop the excess voltage. According  
> to the article the calculation of the resistor for a 10Mohm meter is as  
> follows...

>  
>  $10,000,000 \times 1.414 = 14,140,000$   
>  $14,400,000 - 10,000,000 = 4,140,000$  ohms or 4.14Mohms.  
>  
> The resistor needs to be 4.14Mohms  
>  
> the probe will work for analog meters as well as long as you know the input  
> resistance.

Wayne et al.,

I would like to add my 2 cents. IMHO the ratio of resistance of the diode in the reverse direction to the input resistance of the load (10 MOhm + 4,14 MOhm) plays a role in the accuracy of the RF probe, too.

The reverse resistance of some diodes isn't all that high. Plain vanilla silicon diodes seem to be the best, but Schottky diodes, not to mention Ge diodes are a lot worse and their reverse resistance comes closer to 14 MOhm than I would like.

Maybe somebody more knowledgeable would like to comment on how this works out in practice? Or am I completely off base here? I mean, it wasn't brought up before although the probe discussion has been going on a while.

cheerio,

--

Arjen Raateland  
Finnish Environment Institute  
SAS Support  
phone +358 9 4030 0457

-----  
Date: Wed, 11 Mar 1998 15:56:13 GMT  
From: mwattcpa@earthlink.net (Marty Watt)  
To: ukii@megsinet.net, qrp-1@Lehigh.EDU  
Subject: [5770] Re: Converting Lat/Long?  
Message-ID: <3508b2b0.60615128@mail.earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: quoted-printable

On Wed, 11 Mar 1998 08:16:06 -0600, "ukii" <ukii@megsinet.net> wrote:

>Hello Gang. =20  
>Well,I certainly dont want this question to become a

>lesson in trigonometry but...  
>I am trying to enter my coordinates in a logging program.  
>I got my lat/long off of a Buckmaster callbook at they use  
>something like 87.8904N. My problem is that I need to convert  
>that to minutes/seconds which is what the callbook needs.  
>Trying to enter 87.8904 gives the error,OUT OF RANGE  
>Minutes/SECONDS to 59.  
>Please,can one of you A+B=3DFruitsalad people convert the following?  
>41.9014 N and 087.6723 W to a minutes second deal.

Take the decimal portion (only) and multiply by 60. 87.6723W, take the =  
0.6723  
times 60 =3D 40.338 minutes. Take the decimal and multiply by 60 again.=  
0.338  
times 60 =3D 20.28 Seconds. So, we get 87 deg. 40 min. 20.28 sec W.

Repeat for latitude ...

BTW, your lat/long on buckmaster is probably for the center of your =  
county.  
Close enough for most purposes, but if you can find topo maps (the Atlas =  
and  
Gazeteer pubs are pretty good) you may get more accurate than that. =  
Libraries  
have them, as well as USGS pubs.

>Also,on a recent thread started by someone....  
>>??? I mean like this has to be the most marvelous magic invention of =  
all  
>times!!! You put hot things in, they come out hot... You put cold =  
things  
>in, they come out cold... How do it know ???  
>>  
>sounds like my microwave! Is that right Chuck?  
>Where is NilsBul,anxiously awaiting his answer  
>on the Pos/Neg deal!!!! Maybe he is having trouble converting  
>"big words" to "small words"???

Sounds more like a thermos ...

-----  
Date: Wed, 11 Mar 1998 16:27:18 +0000  
From: Ed Loranger <we6w@qsl.net>  
To: AA3BP@aol.com



Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5771] Re: O'scope help, pse!  
Message-ID: <3506BB66.43B9@qsl.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

[http://www.tektronix.com/Measurement/App\\_Notes/XYZs/intro.html](http://www.tektronix.com/Measurement/App_Notes/XYZs/intro.html)

Start there!!!! Good luck! Have fun.  
vy 72/ Ed, we6w

AA3BP wrote:

>  
> Ok..., I just took delivery of that \$250 TechAmerica 20 mhz scope that many of  
> you have been talking about. It "looks" real nice and my life long fantasy of  
> actually owning a scope is finally realized. Problem: now what do I do with  
> it?  
<snip bad manual etc.... report>

--  
72, Ed, WE6W/qrp CW ONLY; Proud Member: QRP-L/ARCI/Norcal/ARS/AR  
<http://www.qsl.net/we6w> (Enjoying Ham Radio every day.)

-----  
Date: Wed, 11 Mar 1998 10:48:17 -0600  
From: Mike - W0TMW <crucis@sky.net>  
To: QRP-L Mail List <qrp-l@Lehigh.EDU>  
Subject: [5772] Chassis Dry Transfer Labels/stencils  
Message-ID: <3506C051.7A69488F@sky.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Anyone know of a source for panel labels or stencils. There used to be a source for meters, panel switch labels, etc. but I can't find it anymore. I've checked Mouser and they don't have any in their catalog.

Suggestions? Hints?

Mike - W0TMW

--

=====

Mike Watson, W0TMW

QCWA Mbr# 28651, MidContinent Chapter #35

Raymore, Missouri, USA            Grid: EM28st, ARS# 352, QRP-L# 1849  
http://www.sky.net/~crucis       E-mail: crucis@sky.net

-----  
  
Date: Wed, 11 Mar 1998 10:52:50 -0600  
From: Mike - W0TMW <crucis@sky.net>  
To: adams@chuck.dallas.sgi.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5773] Re: Trivial Pursuit for Dweebs (tm)  
Message-ID: <3506C162.6D2C7D77@sky.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Chuck Adams wrote:

>

Big snip!

> Some time back someone asked the question about using a  
> PC board trace for a fuse. Well, if you look closely in  
> the MFJ 9XXX series there is such a critter. But then  
> replacement is another issue. I'm sure someone did the  
> experiment. Some of us have done similar experiments  
> on a workbench with loose clippings from component leads.  
> Sad but true..... :-)

>

Back in my days of being a field tech for a computer manufacturer ('70s/'80s), we had a power supply where the fuses were designed to be protected by the pass transistors! Whenever one failed, sure enough the fuses were OK, we just had to replace the pass transistor.

We always wanted to meet the engineer who designed that PS to "congratulate" him!

Mike - W0TMW

>

Snip!

> Chuck Adams    K5FO   Dallas,TX            CP-60  
> http://reality.sgi.com/adams   adams@sgi.com

--

=====

Mike Watson, W0TMW                      QCWA Mbr# 28651, MidContinent Chapter #35

Raymore, Missouri, USA            Grid: EM28st, ARS# 352, QRP-L# 1849  
http://www.sky.net/~crucis       E-mail: crucis@sky.net

-----  
Date: Wed, 11 Mar 1998 12:17:23 EST  
From: PDouglas12 <PDouglas12@aol.com>  
To: crucis@sky.net, qrp-l@Lehigh.EDU  
Subject: [5774] Re: Chassis Dry Transfer Labels/stencils  
Message-ID: <f2abd468.3506c725@aol.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

Mike,

Most guys are making their own, using a drawing program and their computers. You don't need a big deal CAD program for this. The simple Paint programs that come packaged with all versions of Windows will do fine. The trick is to make a rectangle on your screen that, when printed, is exactly the size of the face of the equipment you want to label up. Then put dots where the holes go, allow room for the knobs and label to your hearts content. I usually use black and white until I am satisfied with the whole decal, then color it as needed and print on plain paper. Cover the front and back with stationary store clear laminating sheet, and you will have a sturdy water-resistant front panel. Hint: If you have a crummy aluminum front panel with extra holes and scratches from construction damage or recycling of the case, this kind of laminated decal will cover a multitude of sins. I don't even bother with glue. The stiff decals can be held in place by the control knob nuts and front panel screws in most equipment. You will almost certainly do a better, neater job this way than you ever could using hand applied labels. The beauty of these computer labels is that you can save the patterns, change them when there are mods, and print them out over and again until they come out right! And, considering the cost of printer ink and paper, and a package of laminating stuff, they are very cheap (not counting the two grand you sunk into the computer hardware in the first place!)

I have dressed up a number of otherwise ugly homebrew projects this way, and some of them have come out looking downright professional. Also, of course, this system is ideal for rarely used devices whose knobs, wires, connectors, and settings become a mystery over the years. Simple instructions can be printed on the face or top with one of these labels, so you won't have to remember which wire goes to ground when you next use the flugel tester.

72,

Preston Douglas WJ2V

-----  
Date: Wed, 11 Mar 1998 12:23:08 -0800  
From: LYN WILLIAMS <designserv@ipass.net>  
To: mwattcpa@earthlink.net  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5775] Re: Converting Lat/Long?  
Message-ID: <3506F2AC.EF07FC73@ipass.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

> BTW, your lat/long on buckmaster is probably for the center of your county.  
> Close enough for most purposes, but if you can find topo maps (the Atlas and  
> Gazeteer pubs are pretty good) you may get more accurate than that. Libraries  
> have them, as well as USGS pubs.

I suspect that BOTH the lat/long info and the county info are based on yourmail address, because the post office which serves(?) our rural mail box is located in the next county and the call sign programs show me to be in that county. The lat/long figures are located in that county, too.

Lyn,  
W4WDN  
in Johnston County, NC

-----  
Date: Wed, 11 Mar 1998 09:27:04 -0800  
From: "Frank A. West" <ke6vhm@earthlink.net>  
To: <crucis@sky.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [5776] Re: Chassis Dry Transfer Labels/stencils  
Message-ID: <199803111744.JAA15409@denmark.it.earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Your local hobby shop. Dry transfer labels for model cars, boats es planes. Very good quality and seem to last a long time without showing any wear. Have used these for many years. Even the old type worked fine for me.

\$.02 de Frank KE6VHM

> Anyone know of a source for panel labels or stencils.

> Suggestions? Hints?

>

> Mike - W0TMW

>

> --

> =====

> Mike Watson, W0TMW                      QCWA Mbr# 28651, MidContinent Chapter #35

>

> Raymore, Missouri, USA                  Grid: EM28st, ARS# 352, QRP-L# 1849

> <http://www.sky.net/~crucis>      E-mail: crucis@sky.net

> =====

>

-----

Date: Wed, 11 Mar 1998 09:54:19 -0800  
From: Steve Pitts <stv@cnw.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5777] Lat/Long source  
Message-ID: <3.0.5.32.19980311095419.007ce3e0@baker.cnw.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

A useful URL for those that want to pin point a set of  
coordinates is:

<http://tiger.census.gov/>

A couple of limits here, the site is real busy, only USA  
based stations will find this useful.

On the plus side, you can pin point Lat/Long coordinates  
to seven decimal places.

(Okay, this wasn't strictly QRP, but you do want those  
miles/watt claims to be as accurate as possible don't you?)

Steve, KJ7NR  
48.4963951 North  
122.6181107 West

-----

Steve Pitts, KJ7NR, NNN0BSC                      stv@cnw.com  
WWW              http://www.cnw.com/~stv/  
FISTS 1530                      G-QRP 8963                      QRP-L 172

-----  
Date: Wed, 11 Mar 1998 12:54:58 -0500  
From: Dale Scott <dcscott@us.ibm.com>  
To: <qrp-l@Lehigh.EDU>  
Subject: [5778] Re: Chassis Dry Transfer Labels/stencils  
Message-ID: <5030100018380862000002L022\*@MHS>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=iso-8859-1  
Content-Transfer-Encoding: quoted-printable

Go to any office supply store and look for something called "repro film"  
" or  
"maktack". They may not know what you are talking about so tell them i=  
t is an  
8.5 x 11 sheet of clear mylar with an adhesive back. If they try to st=  
eer you  
towards the Avery label section of the store you know that they don't h=  
ave all  
their oars in the water.

This stuff has been around for years and works great. It is used in ma=  
ny  
different professions. Architects, for instance sometimes use it to ty=  
pe out a  
bunch of general notes and attach them to a blueprint. The stuff comes=  
in  
different styles, ie matt vs semi-gloss, inkjet, laser printer, copier,=  
etc.  
Most places will sell it by the sheet rather than forcing you to buy an=  
entire  
box. It usually runs between \$0.70 to \$1.00 per sheet. I've been usin=  
g it to  
lay out panels for years and have had good luck.

For instance, I laid out the front and rear panels for my 38 special on=  
my  
computer, ran a sheet through my laser printer, cut the panels out and =  
stuck  
them down to the aluminum and then attached my controls. Looks quite  
professional with the black lettering on the aluminum. You can't even =  
tell  
that the label covers the entire panel as most of it is clear. To make=

it even  
more durable you can spray a coat of clear lacquer over it.

Good luck & 73's -- de dale/w7hlo

Dale C. Scott  
IBM -- Engineering Technology Solutions  
(206) 587-2784 8/277-2784

Internet: (work) dcscott@us.ibm.com  
(home) dcscott@ibm.net  
OV/VM: dcscott@ibmusm54  
=

-----  
Date: Wed, 11 Mar 1998 11:02:22 -0700  
From: "Steve Galchutt" <n0tu@webaccess.net>  
To: "\"Low Power Amateur Radio Discussion\"" <qrp-1@Lehigh.EDU>  
Subject: [5779] Re:Chassis Labels etc.  
Message-ID: <004501bd4d17\$dbfe3ae0\$844a460f@SG2939M.webaccess.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Another method .....

I recently did a front panel for my Sierra (Norcal). I use the computer art method then stopped at a Kinko's and had them laminate the sheet for a buck (less likely to come apart or get moisture damaged because it's heat sealed in plastic!). I then cut out the laminated panels and used spray adhesive to adhere them to the Sierra's aluminum panels.  
The results are here: <http://www.mtechnologies.com/cqc/gallery>

72...Steve

-----  
n0tu - solar powered QRP & wire antennas @ 7,200' ASL  
Monument, Colorado - Grid Sq DM79nb  
email: n0tu@webaccess.net

-----  
Date: Wed, 11 Mar 1998 13:09:14 -0500

From: Michael Maiorana <mikemo@ibm.net>  
To: bmug@gwl.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>  
Subject: [5780] Re: Elmer101  
Message-ID: <3506D34A.245A@ibm.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Brad Mugleston wrote:

> Has the Elmer class started yet? I've got CirCad up and running but I  
> don't have my kit yet. Has anything changed? When are we planning on  
> starting?  
>  
> I NEED A RADIO FIX - PLEASE HELP!!!!!!

Hold tight, Brad. Help is on the way!!!!!!  
The elmer project is starting soon. The last week in March or the first  
week in April.

Stay tuned for details coming up soon.....

--

72 de kf4trd  
Mike Maiorana  
Palm Harbor, FL

"And if I have prophetic powers, and understand all mysteries  
and all knowledge, and if I have all faith, so as to remove  
mountains, but have not love, I am nothing"

-----

Date: Wed, 11 Mar 1998 13:11:14 -0500  
From: sarraf@thermacore.com  
To: mikemo@ibm.net  
Cc: lqrp-1@Lehigh.EDU  
Subject: [5781] Copper foil  
Message-ID: <852565C4.0060920C.00@tci-nt02.thermacore.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=us-ascii

Mike:

I just saw a listing for copper foil tape. The roll was 2" wide x 18 yards  
x \$15.00. I think it was in the latest (purple) All Electronics catalog.  
I do remember the price, etc, since it was about a buck a yard.



Dave Sarraf  
N3NDJ  
Elizabethtown, PA

-----  
Date: Wed, 11 Mar 1998 11:48:39 +0000  
From: Roger Hightower <n7kt@earthlink.net>  
To: crucis@sky.net  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5782] Re: Chassis Dry Transfer Labels/stencils  
Message-ID: <35067A17.D93E6818@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I picked up a nice package of dry transfer labels made by Datak Corp. They have a number of different types, and the one I use is labeled "Amateur Radio + CB", part no. K59. It has about all the labels you would need to finish a panel, front or rear, or a meter.

Got mine at a local electronics store.

--

72/73, de Roger, N7KT

-----  
Date: Wed, 11 Mar 1998 14:09:29  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: qrp-1@lehigh.edu  
Subject: [5783] YAK- Yet Another Keyer  
Message-ID: <3.0.3.16.19980311140929.26e74b1e@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Well, my NorCal-K8FF paddles have been sitting around long enough. Figured it was about time to build a keyer and start practicing.

So, I've come up with a simple keyer that's looking kinda neat. It runs on 3 volts, uses an opto coupler for the key output and since I like to be able to see what speed I'm set to, it has a two digit LED display that flashes the code speed for a second or two when you change speeds. Rather than use push buttons for selecting speed, I used a small el-cheap-o mechanical encoder, so its knob selected.

The program's not quite done yet, I still need to add a message memory and figure out a way to "wake-up" the cpu with out adding another push button. BTW, the cpu is an Atmel 89C2051, the "baby" 8051

No plans on making more than this one, but I \*could\* be talked into it, if the world needs yet another keyer :-)

72,

Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

-----  
Date: Wed, 11 Mar 1998 13:01:15 -0500  
From: rhiller@sysdev.com (Rick Hiller)  
To: qrp-l@Lehigh.EDU  
Subject: [5784] Re: 40 meter loops  
Message-ID: <3506D16B.4111@sysdev.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Charles,

Check out:

<http://www.hal-pc.org/~bvarc/antennas.htm>

Specifically the Delta loop articles.

I didn't read your initial postings so how did you have your delta loop oriented and fed?

GL...72...Rick...W5RH

-----  
Date: Wed, 11 Mar 1998 12:17:22 -0700  
From: tom whalen <whalen@swcp.com>  
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [5785] Tonga on 10!  
Message-ID: <3506E342.5A00@swcp.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Just worked A35RK on 28.022 with a good signal! I was running 5 watts and a rotary dipole and he gave me a 599!!

QRZ.com says he is in TONGA....Maybe I should have ordered a GM-10 instead of the GM-15!!!! PS: I guess this is one of the bennies of working afternoon shift....Got the band to myself...sorta! 72, Tom WB5QYT " Have spud will travel!"

-----  
Date: Wed, 11 Mar 1998 12:18:11 -0700  
From: tom whalen <whalen@swcp.com>  
To: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>  
Subject: [5786] time  
Message-ID: <3506E373.6B53@swcp.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I worked Tonga at 1919 utc....just for info. Tom

-----  
Date: Wed, 11 Mar 1998 20:27:44 +0100  
From: eric <epaolin@mail5.clio.it>  
To: qrp-1@Lehigh.EDU  
Subject: [5787] Lewallen's QRP Xrncvr?  
Message-ID: <1322474432-902242@mail5.clio.it>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Thanks for the responses on possible psuedo 38' Special kits. I am now wondering if anyone has any experience or input on Roy Lewallen's Optimized QRP Transceiver (Aug 80 QST, 1993 Handbook, etc.)?

-----  
Date: Wed, 11 Mar 1998 13:32:00 +0000  
From: Jim <kj5tf@mctc.com>  
To: qrp-1@Lehigh.EDU  
Subject: [5788] Battery power for cool QRP'ing  
Message-ID: <35069250.7ED5@mctc.com>  
MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I'm posting a article I wrote for the Arkansas QRP club's March newsletter. If you want to join, membership is free and there is no dues officers, etc.

If you are into QRP think about this; wouldnt it be more fun to power your rig from a power supply fitting your little QRP rig? Learning how to live on a power supply "budget" is allot like learning how to love QRP. Just as QRP adds to the fun in amateur radio, running on a small battery pack can add fun to QRP'ing.

#### BUILDERS CORNER

##### Battery Power for your QRP RIGS

Every ham shack needs a small rechargeable battery pack. Its fun getting used to the limited amount of power on hand at any radio session. Just like QRP was fun getting used to when you first tried it! You don't need to spend much cash really. And if your a good scrounger you can do it "free" and have even more fun. I have played with small gellcells and have some success. But even though I like these lead acid batteries there are drawbacks. They are sealed, so as soon as one cell goes bad you have big problems. Once I had several of these given to me and I sorted them out finding & marking the good and the bad. Attempted to revive the bad, and looked at what I had. I ended up having to break into the tops and was able to detach and swap out cells. Allot of work but I had a couple decent batteries, for awhile.

Then I started finding these nicad C and AA battery packs. The process of detaching and re-soldering was much easier and neater! Naturally D cells are a good find if you're lucky. Right now I'm able to find new 12.8v nicad packs for \$10. , with recent dates. At that price I have three packs on hand. Enough to last all day. A wall charger comes with the deal.

All my internal charging regulator circuits went bad, but it was EZ to open the LuxCell plastic case and wire around them. Now I just use care when I charge them with the hot 800ma charger that comes with them. I should use a 200-300ma charger really. Its not a good idea to overcharge these little cells.

Available from All Electronics, part # BTC-2. 1.800.826.5432 or allcorp@allcorp.com But by all means try to scrounge your nicads from defunct cordless appliances. Its a "free" power source for your QRP rigs, and keeps these nicads out of landfills where they don't belong. Just eliminate the ones that don't take or hold a charge. String the winners together and make them physically stable. Attach a suitable power jack for your QRP rigs and your set for hours.

Charge them with a standard "wall wart" with 12v 200-800ma DC output. Don't get on the air while charging though, the wall chargers don't have decent filters and your CW note will have strong AC buzz. Yes you will need several rechargeable battery packs, but its affordable if done right, and you can add on more as you go.

The latest copy of American Science & Surplus has some interesting Nicads listed. For example, #16956 is a Nicad 8 pack of 2 Ah cells. The weight is listed as 22oz, and priced at \$6. Also check out #16954 this is 5, 1.8Ah C cells for \$4.25.

Contact AS&S at (847) 982-0870 or, [www.sciplus.com](http://www.sciplus.com)

Check surplus btrys right away and contact them if there is any problem for a refund or replacement. 72/3'z de Jim KJ5TF AR QRP #2

(I get no kick-back for posting info on A.S.S or All Electro)

-----  
Date: Wed, 11 Mar 1998 13:49:45 -0600  
From: Kevin Muenzler <[wb5rue@stic.net](mailto:wb5rue@stic.net)>  
To: Low Power Amateur Radio Discussion <[qrp-1@Lehigh.EDU](mailto:qrp-1@Lehigh.EDU)>, "'[whalen@swcp.com](mailto:whalen@swcp.com)'"  
<[whalen@swcp.com](mailto:whalen@swcp.com)>  
Subject: [5789] RE: Tonga on 10!  
Message-ID: <01BD4CF4.8DBC48E0@muenzlerk.uthscsa.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

On [whalen@swcp.com](mailto:whalen@swcp.com), tom whalen[SMTP:[whalen@swcp.com](mailto:whalen@swcp.com)] wrote:  
> Just worked A35RK on 28.022 with a good signal! I was running 5 watts  
> and a rotary dipole and he gave me a 599!!  
> QRZ.com says he is in TONGA....Maybe I should have ordered a GM-10  
> instead of the GM-15!!!! PS: I guess this is one of the bennies of  
> working afternoon shift....Got the band to myself...sorta! 72, Tom  
> WB5QYT " Have spud will travel!"  
>  
>

I've worked Paul before. He's really active on 17 meters CW. He has a QSL manager. I think it is W7TSQ but don't quote me on it.

Kevin, WB5RUE  
[wb5rue@stic.net](mailto:wb5rue@stic.net)

Leeniers? We dunt need no steenking leeniers!

-----  
Date: Wed, 11 Mar 1998 14:08:39 -0600  
From: Mike - W0TMW <crucis@sky.net>  
To: QRP-L Mail List <qrp-l@lehigh.edu>  
Subject: [5790] QRP Kansas City?  
Message-ID: <3506EF47.F760AF1D@sky.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Any QRPers in the Kansas City Area? Any clubs?

--  
=====

Mike Watson, W0TMW	QCWA Mbr# 28651, MidContinent Chapter #35
Raymore, Missouri, USA	Grid: EM28st, ARS# 352, QRP-L# 1849
<a href="http://www.sky.net/~crucis">http://www.sky.net/~crucis</a>	E-mail: crucis@sky.net

=====

-----  
Date: Wed, 11 Mar 1998 15:11:05 EST  
From: RangerSF5 <RangerSF5@aol.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5791] lat and long. if it's in the call book,ham related???  
Message-ID: <ac0a721f.3506efdb@aol.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

I,m posting this for all to see.  
As a former Military LN instructor I think I can help you out  
87.8904.divide 89 by 100,then multiply that answer by 60.  
Always remember the first two numbers,in this case ( 89)

is 100th of a minute so divide by 100 at all times then X the answer by 60  
minutes.Anything left over,repeat the above to get your seconds  
For 87.8904,I got a reading of 87 deg. 53 minutes and 40 seconds  
The first two numbers are always based on 100

Bob  
WA2HOQ

-----  
Date: Wed, 11 Mar 1998 12:17:52 -0800  
From: "Wayne Barnhart" <wb7whi@triax.com>  
To: <Arjen.Raateland@vyh.fi>, "Low Power Amateur Radio Discussion" <qrp-  
l@lehigh.edu>  
Subject: [5792] Re: Elmer 101: RF probes  
Message-ID: <199803112014.MAA12417@smtp.triax.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Remember you are dealing with 10 Mohms vs. diode resistance. The diode resistance contribution would be swamped in the forward direction. In the reverse direction I don't think it is part of the overall probe resistance. It is only acting like a rectifier.

My resistors in parallel come out a bit low, something like 3.9M $\Omega$  as opposed to 4.14M $\Omega$ . Yet the computed power out vs. measured power out had a difference of perhaps a 10th of a watt. I could fuss around with the resistance and get closer to 4.14M $\Omega$  but why?

Wayne WB7WHI  
Spokane, Wa.

-----  
> Wayne et al.,  
>  
> I would like to add my 2 cents. IMHO the ratio of resistance of the  
> diode in the reverse direction to the input resistance of the load (10  
> M $\Omega$  + 4.14 M $\Omega$ ) plays a role in the accuracy of the RF probe, too.  
>  
> The reverse resistance of some diodes isn't all that high. Plain vanilla  
> silicon diodes seem to be the best, but Schottky diodes, not to mention  
> Ge diodes are a lot worse and their reverse resistance comes closer to  
> 14 M $\Omega$  than I would like.  
>  
> Maybe somebody more knowledgeable would like to comment on how this  
> works out in practice? Or am I completely off base here? I mean, it  
> wasn't brought up before although the probe discussion has been going on  
> a while.  
>  
> cheerio,

> --  
> Arjen Raateland  
> Finnish Environment Institute  
> SAS Support  
> phone +358 9 4030 0457

-----  
Date: Wed, 11 Mar 1998 15:14:28 -0500  
From: Ken Freedman <n1qqv@cshore.com>  
To: AA3BP@aol.com  
Cc: qrp-l@lehigh.edu  
Subject: [5793] Re: O'scope help, pse!  
Message-ID: <3.0.32.19980311151032.006ade70@cshore.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 10:07 PM 3/10/98 EST, you wrote:

>Ok..., I just took delivery of that \$250 TechAmerica 20 mhz scope that

Hi Jim,

OK on the new 'scope! A bit of experimentation should get you started with it. The big advantage of a 'scope is that it lets you "see" electricity. Think about that a bit. One area where it will serve you well is DC power supplies. A supply that looks fine with a DVM can have enough ripple on it (either because it's overloaded or failing) to hammer the device it's powering. This is especially important where receivers and micro processors are concerned. Another interesting project is to trace a signal all the way through a receiver to the speaker. If you have the service manual for one of your rigs, it probably shows pics of scope traces that you should see at various test points. If not, try following the schematic. Get in there and see what you can see.

Don't be afraid of it. As with so many things, there's no substitute for (hard won) experience. Have fun!

73, Ken

Ken Freedman  
AKA N1QQV/QRP ARRL VE, QRP-L

-----  
Date: Wed, 11 Mar 1998 15:20:41 -0500



From: Bob <hb\_elec@ids.net>  
To: qrp-1@lehigh.edu  
Subject: [5794] Measuring Pico Farids and uHenerys  
Message-ID: <3.0.1.32.19980311152041.00695a64@mail.ids.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Good after noon everyone,

I read with interest most of the thread about how to read low values caps and inductors.

Sometime its just easier to buy something to do the job. I found that the L/C Meter IIB from Almost All Digital Electronics , <<http://www.aade.com>> fit the bill for me. Its a kit thats easy to assemble and it reads from .001 uHy to 100 mHy and .010 pF to 1 uFd. The caps must be non-polarized.

Im real happy with mine.

I have no interest in AADE, just a satisfied customer

Bob- N1PWU

-----  
Bob N1PWU - HB Electronics  
<[http://users.ids.net/~hb\\_elec](http://users.ids.net/~hb_elec)>

-----  
Date: Wed, 11 Mar 1998 09:58:38 -0500  
From: Hank Kohl K8DD <k8dd@contesting.com>  
To: ukii@megsinet.net  
Cc: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [5795] Re: Converting Lat/Long?  
Message-ID: <3.0.1.32.19980311095838.006e0e28@192.0.0.1>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 08:16 AM 3/11/98 -0600, ukii wrote:

>Hello Gang.  
>Well,I certainly dont want this question to become a  
>lesson in trigonometry but...  
>I am trying to enter my coordinates in a logging program.  
>I got my lat/long off of a Buckmaster callbook at they use  
>something like 87.8904N. My problem is that I need to convert  
>that to minutes/seconds which is what the callbook needs.  
>Trying to enter 87.8904 gives the error,OUT OF RANGE

>Minutes/SECONDS to 59.

>Please, can one of you A+B=Fruitsalad people convert the following?

>41.9014 N and 087.6723 W to a minutes second deal.

41.9014	.9014 x 60 = 54.08	54.08 min	41' 54
	08 x 6 = 48	48 sec	41' 54" 48s
87.8904	.8904 x 60 = 53.42	53.42 min	87' 53'
	4.2 x 6 = 25.2	25.2 sec	87' 53" 25s

Accuracy? Pretty close!

Theory? Dunno, but it is close enough for my yagi when I'm getting beam headings.

73 Hank K8DD

\*/ Hank Kohl K8DD k8dd@contesting.com  
\*/ ARRL TS (k8dd@tir.com)  
\*/ G-QRP ARRL/LM QCWA/LM QCAO/LM  
\*/ QRP-ARCI - Director MI-QRP - Vice Pres.  
\*/ <http://www.QRPARCI.org>  
\*/ <http://www.geocities.com/capecanaveral/2844/miqrp.htm>

-----  
Date: Wed, 11 Mar 1998 16:09:55 -0500  
From: Hank Kohl K8DD <k8dd@contesting.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5796] WQ8RP ARRL DX Contest  
Message-ID: <3.0.1.32.19980311160955.006d25a4@192.0.0.1>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

There isn't a link from MI QRP page yet, but the writeup with pictures for the WQ8RP Multi-2 QRP operation in the ARRL DX CW contest is:

<http://www.geocities.com/capecanaveral/2844/wq8rpx.html>

\*/ Hank Kohl K8DD k8dd@contesting.com

\*/ ARRL TS (k8dd@tir.com)  
\*/ G-QRP ARRL/LM QCWA/LM QCAO/LM  
\*/ QRP-ARCI - Director MI-QRP - Vice Pres.  
\*/ <http://www.QRPARCI.org>  
\*/ <http://www.geocities.com/capecanaveral/2844/miqrp.htm>

-----  
Date: Wed, 11 Mar 1998 14:45:33 +0000  
From: Roger Hightower <n7kt@earthlink.net>  
To: k8dd@contesting.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5797] Re: Converting Lat/Long?  
Message-ID: <3506A38D.C82E800@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hank Kohl K8DD wrote:

> 41.9014 .9014 x 60 = 54.08 54.08 min 41' 54  
> 08 x 6 = 48 48 sec 41' 54" 48s

> Accuracy? Pretty close!  
> Theory? Dunno, but it is close enough for my yagi when I'm  
> getting beam headings.  
>

Not quite close....should be .08 x 60 = 4.8 s, or 41 deg 54 min 4.8 sec.

--  
72/73, de Roger, N7KT

-----  
Date: Wed, 11 Mar 1998 16:44:10 -0500  
From: joel malman <malman@world.std.com>  
To: qrp-1@lehigh.edu  
Cc: malman@world.std.com  
Subject: [5798] All day QRN/M on 20 meters!  
Message-ID: <199803112144.AA29935@world.std.com>

If you are at work now and are planning to work 20 meters CW this eve,  
you might be in for a surprise.

It seems there is one QRN/QRM (digital?) signal on the 20 meter band

that has been on all day (from at least 1600) till now 2130z. This signal is at least 25-30 Kc wide and sounds like a World War 1 Bi-Plane that is always running out a gas. The signal seems centered on 14058 and can easily be heard down to 14040 and up to 14070.

There are some QRO stations breaking through but I have not been able to hear anything QRP.

Good luck in your area.

72,

/joel      wa1qvm

-----  
Date: Wed, 11 Mar 1998 17:54:36 -0500 (EST)  
From: Chris Cartwright <ccart@dns.vidtel.com>  
To: QRP Reflector <qrp-l@lehigh.edu>  
Subject: [5799] DK3 Group buy UPDATE!  
Message-ID: <Pine.LNX.3.93.980311170345.1327E-100000@dns.vidtel.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Well Gang, first let me say thanks for the overwhelming response! Only about 1% of QRP-L responded so far and we've wiped out the world supply of available DK3's :) Once again the power of QRP! Don had about a dozen ready to go, and another dozen "in process", and we got to 30 units in less than 24 hours! I'm sure he has other customers too, so that will use up a few.

I'm not sure how long it will take for Don to make up the "extras", so what I need to ask, is for those that can wait a little longer to let me know. I've already moved myself to the end of the list (since I caused the problem;) and W6AAQ is going in for surgery on 3/24 and will be out of commission for a few days, adding some delay. Neither of us knows how much of a delay, but I will keep everyone in the group buy informed.

Sorry for the problems, but I thought I'd let everyone know as soon as possible to try to minimize the impact. And the \$115 price was for CONUS shipping, DX shipping cost varies by how DX you are. I'll work it out with each DX order since I didn't remember this list is global :)

Oh, a "Get Well" QSL to Don after the 24th may not hurt our cause either.

72 all and tnx agn

-- Chris Cartwright, Technical Engineer | ccart@vidtel.com --  
-- N3XRV ARRL-VE QRP WAS 28/13(w/c) | http://dns.vidtel.com/~ccart --  
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? NJ-QRP #105 LIQRP #???? MDmW #5 --

-----  
Date: Wed, 11 Mar 1998 13:56:04 -0800 (PST)  
From: "Robert P. Okas" <vintage@best.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5800] Req: How to obtain an XE reciprocal license?  
Message-ID: <Pine.BSF.3.96.980311135257.4729A-100000@shell14.ba.best.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Folks,

I find my travels will take me "South of the Border" later this month and I'd like to carry along some RF ejecting/detecting apparatus. Can anyone offer some insight about how I go about operating in XE-land?

TIA,  
Bob - W3CD

-----  
Date: Wed, 11 Mar 1998 14:11:24 -0800  
From: Vic Rosenthal <rakefet@rakefet.com>  
To: malman@world.std.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5801] Re: All day QRN/M on 20 meters!  
Message-ID: <35070C0C.9E325B2C@rakefet.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

joel malman wrote:

>  
> If you are at work now and are planning to work 20 meters CW this eve,  
> you might be in for a surprize.  
>  
> It seems there is one QRN/QRM (digital?) signal on the 20 meter band  
> that has been on all day (from at least 1600) till now 2130z. This signal  
> is at least 25-30 Kc wide and sounds like a World War 1 Bi-Plane that is

> always running out a gas. The signal seems centered on 14058 and can  
> easily be heard down to 14040 and up to 14070.  
>  
> There are some QRO stations breaking through but I have not been able  
> to hear anything QRP.

I've heard something like this on 24 and 18 mHz. Joel's description is accurate.  
Does anyone have any idea what this is?

Vic K2VCO  
Fresno CA

-----  
Date: Wed, 11 Mar 98 17:01:01 PST  
From: "Robert Roach" <KE4QOK@worldnet.att.net>  
To: qrp-l@lehigh.edu  
Subject: [5802] Test (no test)  
Message-ID: <MAPI.Id.0016.004534514f4b20203030303630303036@MAPI.to.RFC822>  
MIME-Version: 1.0

-----  
Date: Wed, 11 Mar 1998 14:08:13 -0600  
From: ab5uacw@juno.com (Clifton W Sikes)  
To: qrp-l@lehigh.edu  
Subject: [5803] Buzz Not, with an Argosy?  
Message-ID: <19980311.152355.6646.0.ab5uacw@juno.com>

I just got a call from my brother , wanting me to ask if anyone has tried  
the Buzz Not with an Argosy. Will it fit in the case? I sent him to the  
Wilderness page, but figured someone here might know.

Thanks,

Clif

Clifton Sikes AB5UA QRP-L #478  
Earlsboro, Ok.  
ab5uacw@juno.com

-----  
You don't need to buy Internet access to use free Internet e-mail.  
Get completely free e-mail from Juno at <http://www.juno.com>

Or call Juno at (800) 654-JUNO [654-5866]

-----  
Date: Wed, 11 Mar 1998 16:55:24 -0600  
From: Mike and Joyce Watson <crucis@sky.net>  
To: rakefet@rakefet.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5804] Re: All day QRN/M on 20 meters!  
Message-ID: <3507165C.F17E47FA@sky.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I heard it just now. It's almost, but not quite, like 300 baud packet.  
Definately a digital signal. Heavily overdriven!

Mike - W0TMW

Vic Rosenthal wrote:

>  
> joel malman wrote:  
> >  
> > If you are at work now and are planning to work 20 meters CW this eve,  
> > you might be in for a surprize.  
> >  
> > It seems there is one QRN/QRM (digital?) signal on the 20 meter band  
> > that has been on all day (from at least 1600) till now 2130z. This signal  
> > is at least 25-30 Kc wide and sounds like a World War 1 Bi-Plane that is  
> > always running out a gas. The signal seems centered on 14058 and can  
> > easily be heard down to 14040 and up to 14070.  
> >  
> > There are some QRO stations breaking through but I have not been able  
> > to hear anything QRP.  
>  
> I've heard something like this on 24 and 18 mHz. Joel's description is  
accurate.  
> Does anyone have any idea what this is?  
>  
> Vic K2VCO  
> Fresno CA

--

=====

Mike Watson, W0TMW,	QCWA Mbr # 28651, Chap. 35
Raymore, MO USA	Grid: EM28st

<http://www.sky.net/~crucis>

E-mail: [crucis@sky.net](mailto:crucis@sky.net)      ARS# 352, QRP-L# 1489

=====

-----  
Date: Wed, 11 Mar 1998 15:09:38 -0800

From: "Alan Kaul" <[alan.kaul@worldnet.att.net](mailto:alan.kaul@worldnet.att.net)>

To: <[k8dd@contesting.com](mailto:k8dd@contesting.com)>, "Low Power Amateur Radio Discussion" <[qrp-l@lehigh.edu](mailto:qrp-l@lehigh.edu)>

Cc: "RangerSF5" <[RangerSF5@aol.com](mailto:RangerSF5@aol.com)>

Subject: [5805] Problem Converting Lat/Long !!

Message-ID: <19980311230901.AAA14862@default>

MIME-Version: 1.0

Content-Type: text/plain; charset=ISO-8859-1

Content-Transfer-Encoding: 7bit

TWO DIFFERENT MESSAGES -- TWO DIFFERENT SOLUTIONS, AND TWO DIFFERENT  
GEOGRAPHIC LOCATIONS 15-MINUTES APART.

WHY...BECAUSE LAT/LONG NOTATION HAS A CODE OF IT'S OWN---IT'S NOT A  
FOUR-PLACE-DECIMAL-FRACTION-OF-A-DEGREE (or at least it's not always that  
way). LOOK AT THE FOLLOWING POSTS FROM EARLIER TODAY:

<As a former Military LN instructor I think I can help you out

<87.8904.divide 89 by 100,then multiply that answer by 60.

<Always remember the first two numbers,in this case ( 89)

<is 100th of a minute so divide by 100 at all times then X the answer by 60

<minutes.Anything left over,repeat the above to get your seconds

<For 87.8904,I got a reading of 87 deg. 53 minutes and 40 seconds

<The first two numbers are always based on 100

<Bob

<WA2HOQ

-----  
>41.9014      .9014 x 60 = 54.08      54.08 min      41' 54  
                 08 x 6 = 48      48 sec      41' 54" 48s  
>87.8904      .8904 x 60 = 53.42      53.42 min      87' 53'  
                 4.2 x 6 = 25.2      25.2 sec      87' 53" 25s

>Accuracy?    Pretty close!

>Theory?      Dunno, but it is close enough for my yagi when I'm

>getting beam headings.

>73      Hank      K8DD

-----  
COMMENTS ANYONE? DOES THE 15-MINUTES DIFFERENCE MATTER

WHEN POINTING A YAGI? DOES IT MATTER WHEN CALCULATING MILES PER WATT?

Alan Kaul, W6RCL, LaCanada, CA

[w6rcl@amsat.org](mailto:w6rcl@amsat.org)



<http://home.att.net/~alan.kaul/qrp.html>

-----  
Date: Wed, 11 Mar 1998 18:21:02 -0500  
From: "John J. McDonough" <jjmcd@mdn.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [5806] Re: All day QRN/M on 20 meters!  
Message-ID: <199803112316.3167800@midland2.mdn.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Nothing but a few CW signals here in the frozen north! Checked just now  
and also about a half hour ago.

73 de WB8RCR

-----  
End of QRP-L Digest 1026

\*\*\*\*\*  
-----